R,D,T & E PROGRAMS (R-1) DEPARTMENT OF DEFENSE BUDGET FOR FISCAL YEARS 1988 AND 1989

(U.S.) Department of Defense Washington, DC

Feb 88

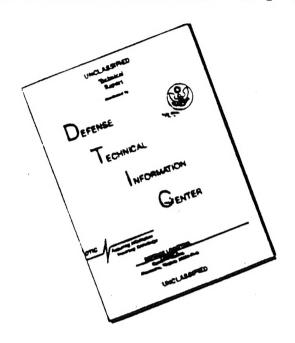
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DEPARTMENT OF DEFENSE BUDGET FOR FISCAL YEARS 1988 AND 1989

Preface

The R.D.T.& E. Programs (R-1) exhibit is derived from and consistent with the R.D.T.& E. Annex data base.

The R-1 is provided annually to the DoD oversight committees of the Congress coincident with the transmission by the President of the Budget of the United States Government. An unclassified version is provided to OASD(PA) for use by non-DoD activities.

Office of the Assistant Secretary of Defense

Comptroller

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RDT&E PROGRAMS (R-1)

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Department of Defense FY 1989 R D T & B Program

Exhibit R-1

	Summary			Date: F	Date: February 1988
				Thousands of Dollars	of Dollars
	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED FY 1989
Summary By Appropriation	,				
Research Development Test & Eval Army	4,699,035	4,670,659	5,972,845	-942,145	5,030,700
Research Development Test & Bval Navy	9,292,433	9,512,917	10,044,819	-828,619	9,216,200
Research Development Test & Bval AF	15,050,523	15,165,388	17,728,571	-2,796,471	14,932,100
Research Development Test & Eval Def Ag	6,768,110	7,661,825	10,120,664	-1,452,864	8,667,800
Director of Test & Bval Defense	119,906	182,116	186,128	-19,228	166,900
Director of Operational Test & Evaluation	11,300	70,221	149,657	-6,257	143,400,
Total Research, Development, Test & Evaluation	35,941,307	37,263,126	44,202,684	-6,045,584	38,157,100
Summary Recap of Research Categories					
Research	893,587	901,403	982,808	-69,322	916,486
Exploratory Development	2,343,208	2,392,306	2,657,515	-296,644	2,360,871
Advanced Development	10,426,308	12,445,534	16,047,465	-4,873,317	11,174,148
Engineering Development	9,340,599	9,640,526	12,971,785	-1,384,299	11,587,486
Management and Support	2,942,697	2,513,750	2,764,294	-204,541	2,559,753
Research and Development (FYDP Program 6)	25,946,399	27,893,519	35,426,867	-6,828,123	28,598,744
Operational Systems Development	9,994,908	9,369,607	8,775,817	782,539	9,558,356
Total Research, Development, Test & Evaluation	35,941,307	37,263,126	44,202,684	-6,045,584	38,157,100

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Summary

Department of Defense FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1

				Thousands of Dollars	of Dollars
	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
Summary Recap of Budget Activities					-
Technology Base	3,236,795	3,293,709	3,643,323	-365,966	3,277,357
Advanced Technology Development	5,031,803	5,433,672	8,477,821	-1,970,528	6,507,293
Strategic Programs	7,703,300	7,390,674	9,222,921	-2,698,314	6,524,607
Tactical Programs	11,031,555	12,211,715	13,826,516	-733,857	13,092,659
Intelligence and Communications	4,702,339	4,882,161	4,841,956	-372,134	4,469,822
Defensewide Hission Support	4,235,515	4,051,195	4,190,147	95,215	4,285,362
Total Research, Development, Test & Evaluation	35,941,307	37,263,126	44,202,684	-6,045,584	38,157,100
Summary Recap of PYDP Programs					
Strategic Forces	1,147,222	831,973	813,283	-116,467	696,816
General Purpose Forces	2,192,007	1,762,879	1,724,294	287,573	2,011,867
Intelligence and Communications	6,361,788	6,244,624	5,744,597	460,298	6,204,895
Airlift/Sealift	97,017	26,922	128,397	-115,463	12,934
Guard and Reserve	37,318	59,965	83,367	-79	83,288
Research and Development (FYDP Program 6)	25,946,399	27,893,519	35,426,867	-6,828,123	28,598,744
Central Supply and Maintenance	150,662	177,235	278,231	-60,750	217,481
Training Medical and Other	4,424				
Support of Other Nations	4,320	3,591	3,648	530	4,178
Special Operations Forces	150	262,418		326,897	326,897
Total Research, Development, Test & Evaluation	35,941,307	37,263,126	44,202,684	-6,045,584	38,157,100

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Department of the Army FY 1989 R D T & E Program

Exhibit R-1

	Summary			Date: Fe	February 1988
				Thousands o	of Dollars
	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
Summary Recap of Research Categories					
Research Exploratory Development Advanced Development	219,459 637,050	168,936	197,642	-24,137 -74,198	173,505
Engineering Development Management and Support	1,102,507	1,094,338 1,102,594 1,063,682	1,434,264 2,013,716 1,191,779	-328,916 -592,579 -86,912	1,105,348 1,421,137 1,104,867
Research and Development (FYDP Program 6) Operational Systems Development	4,055,642	3,978,472	5,490,059	-1,106,742	4,383,317
Total Research Development Test & Eval Army	4,699,035	4,670,659	5,972,845	-942,145	5,030,700
Summary Recap of Budget Activities					
Technology Base Advanced Technology Development Strategic Programs	856,509 432,797 227,219	717,858 353,969 118,462	850,300 488,782 87,233	-98,335 -114,425	751,965
Tactical Programs Intelligence and Communications Defensewide Mission Support	1,971,227 95,429 1,115,854	2,294,469 107,718 1,078,183	3,264,368 74,899 1,207,263	-611,253 -22,496 -88,511	2,653,115 52,403 1,118,752
Totál Research Development Test & Eval Army	4,699,035	4,670,659	5,972,845	-942,145	5,030,700
Summary Recap of FYDP Programs					
Strategic Forces General Purpose Forces Intelligence and Communications Research and Development (FYDP Program 6) Central Supply and Maintenance Special Operations Forces	199,796 296,490 118,964 4,055,642 27,993	86,861 357,011 124,154 3,978,472 20,904 103,257	57,051 313,294 90,426 5,490,059	-125 63,747 -29,498 -1,106,742 -2,163 132,636	56,926 377,041 60,928 4,383,317 19,852 132,636
Total Research Development Test & Eval Army		4,670,659	5,972,845	-942,145	5,030,700

Department of the Army FY 1989 R D T & E Program

Appropriation: 2040 A Research Development Test & Eval Army

Exhibit R-1

Date: February 1988

						***************************************	Thousands of Dollars	Dollars
Line	Program e Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED e FY 1989 C.
-	0601101A	In-House Laboratory Independent Research	-	16,675				Þ
7	0601102A	Defense Research Sciences		194,452	168,936	117,369	56,136	173,505 U
m	0601103A	University Research Sciences	-	8,332		80,273	-80,273	D
4	0602105A	Materials Technology		17,244	11,589	13,141	-178	12,963 U
S.	0602120A	Electronic Survivability and Fuzing Technology	1	38,487	43,163	42,157	-1,262	40,895 U
•	0602122A	Survivability Enhancement	-					
7	0602211A	Aviation Technology	-					
80	0602303A	Missile Technology	-	25,131	28,951	24,158	1,583	25,741 U
0	0602307A	Laser Weapons Technology	-	5,585	10,000	12,871	-6,505	0,366 U
10	0602601A	Combat Vehicle and Automotive Technology	7	24,970	22,610	21,908	385	22, 293 U
7	0602618A	Ballistics Technology		48,253	22,775	34,909	-7,588	27,321 U
12	0602622A	Chemical, Smoke and Equipment Defeating Technology		55,775	45,079	42,387	988-	41,501 U
13	0602623A	Joint Service Small Arms Program	-	10,751	12,857	15,553	-1,417	
14	0602624A	Weapons and Munitions Technology	-	23,227	21,931	30,997	216	31,213 U
15	0602705A	Electronics and Electronic Devices	-	20,688	21,717	22,499	-738	21,761 U
91	0602709A	Night Vision Technology	-	29,811	22,394	24,817	-1,992	22,825 U
11	0602715A	Electronic Warfare Technology	-					
18	0602716A	Human Factors Engineering Technology		21,148	14,560	15,071	89-	15,003 U
19	0602720A	Environmental Quality Technology		11,118	9,915	9,581	-39	9,542 U

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Department of the Army FY 1989 R D T & E Program

						•	Thousands of	of Dollars
Line	Program ie Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED 6 FY 1989 C
20	0602727A	Non-System Training Device Technology	-	3,666	4,011	3,429		3,429 U
21	0602770A	Military Disease Hazards Technology	-1	41,997	46,137	49,635	-1,353	48,282 U
22	0602782A	Command, Control, Communications Technology	1	32,090	9,764	29,578	-17,000	12,578 U
23	0602783A	Computer and Software Technology	m	8,471	8,221	6,461	-7	6,454 U
24	0602784A	Hilitary Engineering Technology	-	43,478	36,905	49,552	-2,577	46,975 U
25	0602785A	Manpower/Personnel/Training Technology	-	15,300	15,476	17,981	-116	17,865 U
26	0602786A	Logistics Technology		35,533	34,513	45,182	-3,118	42,064 U
27	.0602787A	Medical Technology	-	111.89	54,701	63,310	-5,533	57,777 U
	Technology Base	gy Base		856,509	717,858	850,300	-98,335	751,965
28	0603001A	Logistics Advanced Technology	2	14,582	10,000	19,343	-9,384	n 656'6
29	0603002A	Medical Advanced Technology	8	30,916	33,656	51,772	-17,276	34,496 U
30	0603003A	Aviation Advanced Technology	8	60,464	39,000	40,810	-5,500	35,310 U
31	0603004A	Weapons and Munitions Advanced Technology	N	24,397	24,914	41,562	-2,122	39,440 U
32	0603005A	Combat Vehicle and Automotive Advanced Technology	~	47,597	39,612	54,262	-8,011	46,251 U
33	0603006A	Command, Control, Communications Advanced	8	12,380	7,485	6,759	-2,034	7,725 U
34	0603007A	Human Factors/Personnel/Training Advanced Technology	8	28,787	28,486	46,677	-16,133	30,544 U
35	0603008A	Electronic Warfare Advanced Technology	. 4					
36	0603102A	Materials and Structures Advanced Technology	~	15,641	8,185	9,206	-2,270	п 986'9
37	0603105A	Acquired Immune Deficiency Syndrome (AIDS) Research	N	18,551	11,500	12,000	-3,177	8,823 U
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Department of the Army FY 1989 R D T & E Program

Appropriation: 2040 A Research Development Test & Eval Army

Date: February 1988 Exhibit R-1

Ttem Nomenclature Operational Enhancements Hissile and Rocket Advanced Technology Directed Energy Target Acquisition, Counter/Counter- Countermeasures Army Development and Employment Agency Landmine Warfare and Barrier Advanced Technology Joint Service Small Arms Program Night Vision Advanced Technology Environmental Quality Control Equipment Military Engineering Advanced Technology Advanced Electronic Devices Army Battlefield Technology Integration Chemical Biological Defense and Smoke Advanced Technology Advanced Special Operations Research, Development and Acquisition Trechnology Development. Special Programs Classified Program								Thousands of Dollars	f Dollars
0603255A Operational Enhancements 2 50,144 39,468 060331A	N N		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED 6 FY 1989 C
0603313A Hisaile and Rocket Advanced Technology 2 50,144 39,468 0603314A Directed Energy 2 33,879 18,000 0603321A Target Advanced Technology 2 29,425 10,936 0603321A Countermeasures 0603321A Countermeasures 0603321A Countermeasures 0603321A Countermeasures 0603360A Landmine Warfare and Employment Agency 2 29,425 10,936 0603301A Army Development and Employment Agency 2 28,793 10,675 0603710A Night Vision Advanced Technology 2 28,783 23,653 0603733A Military Engineering Advanced Technology 2 3,814 3,902 0603733A Advanced Electronic Devices and Smoke Advanced 2 3,015 3,564 060375A Advanced Technology Integration 2 1,064 6,117 1140011A Advanced Special Operations Research, Development 2 1,064 6,117 1140011A Advanced Technology Development 2 1,064 6,117 1140011A Advanced Technology Development 2 1,064 6,117 0102814A Special Programs 3 353,969 48 0102814A Special Programs 3 3 3 3 0102814A Special Programs 3 3 3 3 0102814A Special Programs 3 3 3 3 3 0102814A Special Programs 3 3 3 3 3 3 3 0102814A Special Programs 3 3 3 3 3 3 3 3 3	38			8			14,228	-14.228	
0603314A Directed Energy 2 33,879 18,000	39			8	50,144	39,468			
0603321A	\$			8	33,879	18,000	16,363	2.776	13 602
Occurate Acquisition, Counter/Counter—	1			N			32,387	24 600	0 /00/07
0603324A	2		Target Acquisition, Counter/Counter-	N				000 / \$7	0 /8/ 1/
0603607A Landmine Warfare and Barrier Advanced Technology 2 23,493 10,675 1 0603607A Joint Service Small Arms Program 2 6,552 8,820 3,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,653 23,650	3		Countermeasures Army Development and Employment Agency	8	9,425	10,936	17,288	-15,300	1.988 11
0603710A Joint Service Small Arms Program 2 6,552 8,820 0603710A Night Vision Advanced Technology 2 28,783 23,653 2 0603733A Broironmental Quality Control Equipment 2 28,783 23,650 3,050 060373A Military Engineering Advanced Technology 2 3,814 3,902 3,902 060375BA Advanced Electronic Devices 2 4,491 6,089 6,089 060375BA Army Battlefield Technology Integration 2 11,227 9,100 060375BA Advanced Electronic Devices and Smoke Advanced 2 1,064 6,117 1140011A Advanced Tectical Computer Science Technology 2 1,064 6,117 Advanced Special Operations Research, Development 2 1,064 6,117 Advanced Technology Development 2 1,064 6,117 Advanced Technology Development 2 1,064 6,117 Advanced Technology Development 3 432,797 353,969	4		Landmine Warfare and Barrier Advanced Technology		23, 493	10,675	11,579	-2,500	
0603733A Right Vision Advanced Technology 2 28,783 23,653 2 0603733A Environmental Quality Control Equipment 2 3,595 3,050 0603742A Military Engineering Advanced Technology 2 4,491 6,089 0603758A Army Battlefield Technology Integration 2 11,227 9,100 0603759A Chemical Biological Defense and Smoke Advanced 2 3,615 3,564 0603759A Advanced Tactical Computer Science Technology 2 1,064 6,117 140011A Advanced Special Operations Research, Development 2 1,064 6,117 Advanced Technology Development 2 1,064 6,117 34Vanced Technology Development 2 1,064 6,117 360214B Advanced Special Programs 3,5177 353,969	5		Joint Service Small Arms Program	N	6,552	8,820	9,564		
060373A Military Engineering Advanced Technology 2 3,595 3,050 060373A Military Engineering Advanced Technology 2 4,491 6,089 060375BA Army Battlefield Technology Integration 2 11,227 9,100 060375BA Army Battlefield Technology Integration 2 11,227 9,100 060375BA Chemical Biological Defense and Smoke Advanced 2 1,064 6,117 0603772A Advanced Tactical Computer Science Technology 2 1,064 6,117 1140011A Advanced Special Operations Research, Development 2 1,064 6,117 Advanced Technology Development 2 1,064 6,117 Advanced Technology Development 2 1,064 6,117 Advanced Technology Development 353,969 48	9		Night Vision Advanced Technology	7	28,783	23,653	26,169	-2.500	
0603742A Military Engineering Advanced Technology 2 3,814 3,902 0603758A Army Battlefield Technology Integration 0603759A Chemical Biological Defense and Smoke Advanced 2 3,015 3,564 0603759A Advanced Tactical Computer Science Technology 0603772A Advanced Tactical Computer Science Technology 1140011A Advanced Special Operations Research, Development 2 1,064 6,117 Advanced Technology Development Advanced Technology Development 3 353,969 48 0102821A Classified Program	7	0603733A	Environmental Quality Control Equipment	8	3,595	3,050			
0603759A Army Battlefield Technology Integration 0603759A Army Battlefield Technology Integration 0603759A Chemical Biological Defense and Smoke Advanced Technology 0603772A Advanced Factical Computer Science Technology 1140011A Advanced Special Operations Research, Development Advanced Technology Development	0		Military Engineering Advanced Technology	~	3,814	3,902	2.338		
0603758A Army Battlefield Technology Integration 0603759A Chemical Biological Defense and Smoke Advanced Technology 0603772A Advanced Tactical Computer Science Technology 1140011A Advanced Special Operations Research, Development Advanced Technology Development Advanced Technology Development 353,969 0102814A Special Programs 3 0102821A Classified Program	0	0603742A	Advanced Electronic Devices	8	4,491	6.089	7.924	303 6-	2,330
0603759A Chemical Biological Defense and Smoke Advanced 2 3,015 3,564 Technology 0603772A Advanced Tactical Computer Science Technology 2 1,064 6,117 1140011A Advanced Special Operations Research, Development 2 Advanced Technology Development Advanced Technology Development O102814A Special Programs 3 O102821A Classified Program	0	0603758A	Army Battlefield Technology Integration	N	11,227	9,100	109.6	06017	
0603772A Advanced Tactical Computer Science Technology 2 1,064 6,117 1140011A Advanced Special Operations Research, Development 2 Advanced Technology Development 0102814A Special Programs 0102811A Classified Program	=	0603759A	Chemical Biological Defense and Smoke Advanced	8	3,015	3,564	3.450		0 10076
1140011A Advanced Special Operations Research, Development 2 and Acquisition Advanced Technology Development 133,969 10102814A Special Programs 3 0102821A Classified Program	~	0603772A	reciniology Advanced Tactical Computer Science Technology	. 14	1,064	6,117	8,501	-2.000	0 008/6
Advanced Technology Development 0102814A Special Programs 0102821A Classified Program	255	1140011A	Advanced Special Operations Research, Development and Acquisition	8		7,757		14,228	
0102814A Special Programs 3		Advanced	Technology Development		432,797	353,969	488,782	-114.425	226 855
0102821A Classified Program	4	0102814A	Special Programs	m					
	10	0102821A	Classified Program	m					

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Department of the Army FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1 Appropriation: 2040 A Research Development Test & Eval Army

							Thousands of Dollars	Dollars
Line	Program B Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED e FY 1989 C
26	0303152A	World-Wide Military Command and Control Systems, Information System	m	27,423				
	Strategic	c Programs		227,219	118,462	87,233	-7,125	80,108
57	0603220A	Advanced Rotocraft Technology Integration LHX	4	38,385				5
28	0603302A	Antitactical Missile System	4	28,994	22,076	85,853	-54,339	31,514 U
59	0603303A	Surface-to-Surface Missile Rocket System	4	40,136	24,000	37,071	-880	36,191 U
09	0603604A	Nuclear Munitions and Radiacs - Adv Dev	4	7,020	5,841			
19	0603612A	Advanced Anti-Tank Weapon System	Ф	52,455	33,566	117,446	-95,683	21,763 U
62	0603619A	Landmine Warfare and Barrier - Adv Dev	4	6,667	15,783	16,845	-4,349	12,496 U
63	0603627A	Smoke and Equipment Defeating Systems - Adv Dev	4	4,545	7,375	8,518	-3,519	4,999 U
64	0603639A	Aramament Enhancement Initiative	4					
69	0603642A	Evolutionary Surface-to-Air Hissile - Adv Dev	4		•	3,061	80	. 3,053 U
99	0603645A	Armored Family of Vehicles - Advanced Development	4		1,000	44,970	-43,973	U 799
29	0603705A	Physical Security	4	462		2,907	-113	2,794 U
89	0603706A	Identification-Friend-or-Foe - Adv Dev		18,802	10,000	14,940	-129	14,811 U
69	0603711A	Aircraft Survivability Equipment	4			12,548	-12,548	Þ
70	0603713A	Army Data Distribution System	4	39,343	28,000	25,500	-5,550	19,950 U
11	0603718A	Electronic Warfare Systems - Adv Dev	4			16,546	-16,546	מ
72	0603725A	Remotely Piloted Vehicles and Drones - Adv Dev	4	969'6		865'9	865'9-	ם
73	0603730A	Tactical Surveillance System - Adv Dev	4	8,591	34,166			

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Department of the Army FY 1989 R D T & E Program

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			1				Thousands of Dollars	Dollars
Line	Program e Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED 6 FY 1989 C
74	0603738A	Non-System Training Devices - Adv Dev	*	3,329		862	~	n 098
75	0603740A		4	4,512	4,337			
16	0603745A	(CZI) - Adv Dev Tactical Electronic Support Measure Systems	4	7,700	5,735			
11	0603747A	Soldier Support and Survivability	4	4,237	3,864	4,553	-1,123	3.430 U
78	0603751A	Medical Defense Against Chemical Warfare	4	23,905	27,100	28,997	-11,557	17,440 U
79	0603754A	Classified Program (Adv)	4					
80	0603755A	Tactical Electronic Countermeasures Systems - Adv	4	1,562				
18.	0603757A	Forward Area Air Defense (FAAD) System	4	83,902	157,000	166,461	-2,249	164,212 U
82	0603760A	Special Operations Forces Equipment - Adv Dev	4			21,579	-21,579	ם
83	0603766A	Tactical Electronic Surveillance System - Adv Dev	4	11,555	11,959			
84	0603774A	Night Vision Systems Advanced Development	•	1	3,355	3,932	·6-	3,923 U
82	0603775A	Light Armored Vehicle/Weasel Evaluation	4	9,823	1,000			
98	0603776A	Airborne Adverse Weather Weapons System	4		80,000	87,339	-219	87.120 H
87	0603777A	Follow-On LANCE - Adv Dev	4				14.962	14.962 !!
88	0603801A	Aviation - Adv Dev	4	5,291	3,039	4,362	-13	
88	0603802A	Weapons and Munitions - Adv Dev	4	17,058	14,399	12,288	. S	
06	0603803A	Chemical Systems - Adv Dev	4	19,748	15,325			
91	0603804A	Logistics and Engineer Equipment - Adv Dev	4	22,368	16,999	18,987	980'9-	12,901 U
92	0603805A	Combat Service Support Computer System Evaluation and Analysis	*	5,438	1,195	1,426	4	1,422 U

Department of the Army FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1 Appropriation: 2040 A Research Development Test & Eval Army

December Part Par								Thousands of Dollars	Dollars
0603806A Chemical/Biological Defense Rquipment - Adv Dev 4 7,886 10,508 5,513 1,947 1.94	Lin						FY 88/89 PRES BUDGET	FY 1989	S AMENDED e
0603806A Chemical/Biological Defense Equipment - Adv Dev	2		TOWN NOMBING THE	Act	FY 1987	FY 1988	FY 1989	ADJUSTMENT	FY 1989 C
0604202A Medical Systems - Adv Dev Dev 4 26,541 21,863 24,379 -5,500 1 0604202A Aircraft Weapona 4 992 9,697 12,500 -8,039 0604202A Aircraft Weapona 4 100,921 100,000 65,938 -10,140 5 0604202A Aircraft Propulation System 4 100,921 100,000 65,938 -10,140 5 060421A Aircraft Propulation System 4 70,136 44,499 7,747 12 060421A Aircraft Propulation System 4 70,136 4,4499 7,747 12 060421A Aircraft Propulation Program 4 1,966 2,463 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 -4,896 15,395 14,615 14,896 14,896 14,996	93		1	4	7,886	10,508	5,513	1,847	7,360 U
0604202A Altcraft Weapons 4 982 9,697 12,500 -8,039 0604216A Altcraft Propulsion System 4 100,921 100,000 65,938 -10,140 0604223A Light Armed Scout Wellcopter 4 70,136 44,499 -10,140 -10,140 0604210A EW Development 4 70,136 44,499 -407,377 1 0604310A Heliborne Missile - HELLFIRE 4 70,136 4,469 -4,896 -4,896 060431A GRASS BLADE 4 1,966 2,463 14,615 -4,896 060431A GRASS BLADE 4 152,896 1,956 2,463 -4,896 060431A Army Tactical Wissile System (Army TACHS) 4 152,896 10,250 86,618 -2,181 0604601A Muchanced Anti-Tank Weapons System - Eng Dav 4 6,439 17,386 -2,181 -2,181 0604603A Muchanced Anti-Tank Weapon System - Eng Dav 4 6,439 17,286 14,950 -2,181	96		Medical Systems - Adv Dev	4	26,541	21,863	24,379	-5,500	18,879 U
0604216A All coraft Propulsion System 4 100,921 100,000 65,938 -10,140 0604223A Light Armed Scout Helicopter 4 70,136 44,499 -407,377 1 0604230A STINGER 4 70,136 44,499 -4,996 -4,996 -4,996 0604310A Heliborne Missile - HELIFIRE 4 1,966 2,463 14,615 -4,996 060431A Heliborne Missile - HELIFIRE 4 1,966 4,953 14,615 -4,996 060431A Heliborne Missile System (Army TACHS) 4 152,996 152,385 14,615 -4,996 0604603A Army Tactical Missile System (Army TACHS) 4 76,341 101,250 86,618 -2,181 0604603A Army Tactical Missile System (Army TACHS) 4 22,380 17,386 -2,181 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,916 23,555 1,392 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,916 13,2	95		Aircraft Weapons	4	982	6,697	12,500	-8,039	4,461 U
0604223A Light Armed Scout Helicopter 4 30,000 532,064 -407,377 1 0604270A EW Development 4 70,136 44,499 -40,996 -7,747 0604306A STINGER 4 1,966 2,463 14,615 -4,896 060431A GRASS BEADE 4 1,566 1,52,896 152,385 14,615 -4,896 0604321A Joint Tactical Pusion Program 4 2,886 4,953 14,615 -4,896 0604321A Joint Tactical Missile System (Army TACHS) 4 76,341 101,250 86,618 -2,181 0604601A Army Tactical Whiches 4 22,380 17,386 -2,181 1,392 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,906 23,555 1,392 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,906 23,555 1,392 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,906 23,555 1,495 <td>96</td> <td></td> <td>Aircraft Propulsion System</td> <td></td> <td>100,921</td> <td>100,000</td> <td>65,938</td> <td>-10,140</td> <td>55,798 U</td>	96		Aircraft Propulsion System		100,921	100,000	65,938	-10,140	55,798 U
0604306A STINGER 4 70,136 44,499 0604306A STINGER 4 6,409 7,747 0604310A Heliborne Missile - HELLETRE 4 1,966 2,463 060431A GRASS BLADE 4 1,966 2,463 14,615 -4,896 9,719 060431A GRASS BLADE 4 1,966 1,52,896 152,385 14,615 -4,896 9,719 060432A Army Tactical Missile System 4 76,341 101,250 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 76,341 101,250 86,618 -2,181 84,437 0604603A Muclear Hunitions and Radiac - Eng Dev 4 22,380 17,386 13,229 -4,850 84,947 0604603A Madium Tactical Vehicles 4 6,437 9,906 23,555 1,392 24,947 0604613A Advanced Anti-Tank Weapon System - Eng Dev 4 6,437 9,906 23,555 -4,850 06,905	97		Light Armed Scout Helicopter	4		30,000	532,064	-407,377	124,687 U
0604300A STRUÇER 4 6,409 7,747 0604310A Haliborne Missile - HELLETINE 4 1,966 2,463 14,615 -4,896 9,719 0604310A GRASS BLADE 4 2,686 4,953 14,615 -4,896 9,719 060431A GRASS BLADE 4 152,886 152,385 14,615 -4,896 9,719 060432A Army Tactical Pusion Program 4 76,341 101,250 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 76,341 101,250 86,618 -2,181 84,437 0604603A Nuclear Hunitions and Radiac - Eng Dev 4 22,380 17,386 1,392 24,947 0604603A Nuclear Hunitions and Radiac - Eng Dev 4 6,437 9,906 23,555 1,392 24,947 0604603A Smoke and Equipment Defeating Systems - Eng Dev 4 6,437 9,906 23,555 1,392 24,947 060461A Advanced Anti-Tank Weapon System - Eng Dev <	96		EW Development	4	70,136	44,499			
0604310A Heliborne Missile - HELLPIRE 4 1,966 2,463 14,615 -4,896 9,719 0604313A GRASS BLADE 4 2,886 4,953 14,615 -4,896 9,719 0604321A Joint Tactical Fusion Frogram 4 152,896 152,385 101,250 86,618 -2,181 84,437 0604501A Army Tactical Missile System (Army TACMS) 4 76,341 101,250 86,618 -2,181 84,437 0604601A Army Tactical Missile System (Army TACMS) 4 22,380 17,386 -2,181 84,437 0604603A Muclear Hunitions and Radiac - Eng Dev 4 22,380 17,386 1,392 24,947 0604603A Muclear Hunitions and Radiac - Eng Dev 4 6,437 9,978 13,229 -4,850 8,379 0604603A Smoke and Equipment Defeating System - Eng Dev 4 6,437 9,978 13,229 -4,850 8,379 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825	66		STINGER	4	6,409	7,747			ח
060431A GRASS BLADE 4 2,686 4,953 14,615 -4,896 9,719 060432A Joint Tactical Fusion Program 4 152,896 152,385 16,618 -2,181 84,437 0604601A Army Tactical Missile System (Army TACHS) 4 76,341 101,250 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 22,380 17,386 23,555 1,392 24,947 0604603A Nuclear Hunitions and Radiac - Eng Dev 4 6,437 9,906 23,555 1,392 24,947 0604603A Smoke and Equipment Defeating System - Eng Dev 4 6,437 9,906 23,555 1,392 -4,850 8,379 0604602A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 28,825 0604630A Hial Development Program 4 3,618 4,267 28,825 28,825	100		Heliborne Missile - HELLFIRE	4	1,966	2,463			Þ
0604321A Joint Tactical Pusion Program 4 152,896 152,385 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 76,341 101,250 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 22,380 17,386 1,392 24,947 0604603A Nuclear Hunitions and Radiac - Eng Dev 4 22,380 17,386 23,555 1,392 24,947 0604604A Medium Tactical Vehicles 4 6,437 9,978 13,229 -4,850 8,379 060461A Advanced Anti-Tank Weapon System - Eng Dev 4 6,437 9,978 114,239 -3,730 110,509 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 28,825 060463A HIAl Development Program 4 3,618 2,267 28,825 28,825	101	0604313A	GRASS BLADE	4	2,886	4,953	14,615	-4,896	
0604324A Army Tactical Missile System (Army TACHS) 4 76,341 101,250 86,618 -2,181 84,437 0604601A Infantry Support Weapons 4 808 17,386 1,392 24,947 0604603A Nuclear Hunitions and Radiac - Eng Dev 4 22,380 17,386 1,392 24,947 0604604A Medium Tactical Vehicles 4 6,437 9,978 13,229 -4,650 8,379 0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 6,437 9,978 114,239 -3,730 110,509 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 28,825 060430A MIAI Development Program 4 3,618 4,267 28,825 28,825	102		Joint Tactical Pusion Program	4	152,896	152,385			
0604601A Infantry Support Weapons 4 808 0604603A Nuclear Munitions and Radiac - Eng Dev 4 22,380 17,386 0604603A Nuclear Munitions and Radiac - Eng Dev 4 5,906 23,555 1,392 24,947 0604604A Medium Tactical Vehicles 4 6,437 9,906 13,229 -4,850 8,379 0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 6,437 9,978 114,239 -3,730 110,509 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 28,825 0604630A MIA1 Development Program 4 3,618 4,267	103	0604324A	Army Tactical Missile System (Army TACMS)	4	76,341	101,250	86,618	-2,181	
0604603A Nuclear Munitions and Radiac - Eng Dev 4 22,380 17,386 0604604A Hedium Tactical Vehicles 4 9,906 23,555 1,392 0604609A Smoke and Equipment Defeating Systems - Eng Dev 4 6,437 9,978 13,229 -4,850 0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 4,953 114,239 -3,730 1 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 0604702A Joint Tactical Information Distribution System 4 4,267 4,267	104	0604601A	Infantry Support Weapons	4	808				
0604604A Hedium Tactical Vehicles 4 9,906 23,555 1,392 0604609A Smoke and Equipment Defeating Systems - Eng Dev 4 6,437 9,978 13,229 -4,850 0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 4,953 114,239 -3,730 1 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 0604530A MIA1 Development Program 4 3,618 4,267	105	0604603A	Nuclear Munitions and Radiac - Eng Dev	4	22,380	17,386			
0604609A Smoke and Equipment Defeating Systems - Eng Dev 4 6,437 9,978 13,229 -4,850 0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 4,953 114,239 -3,730 1 0604622A Family of Heavy Tactical Vehicles 4 3,618 4,953 28,825 0604630A MIAI Development Program 4 3,618 4,267	90	0604604A	Medium Tactical Vehicles	4		906'6	23,555	1,392	24,947 U
0604611A Advanced Anti-Tank Weapon System - Eng Dev 4 114,239 -3,730 110,509 0604622A Family of Heavy Tactical Vehicles 4 3,618 28,825 28,825 0604502A MIA1 Development Program 4 3,618 4,267 0604702A Joint Tactical Information Distribution System 4 4,267	101	0604609A	1	4	6,437	9,978	13,229	-4,850	8,379 U
0604622A Family of Heavy Tactical Vehicles 4 0604630A MIAl Development Program 0604702A Joint Tactical Information Distribution System 4 4,267	108	0604611A		4			114,239	-3,730	
0604630A MIAl Development Program 4 3,618 0604702A Joint Tactical Information Distribution System 4 4,267	109	0604622A	Family of Heavy Tactical Vehicles	4		4,953		28,825	
0604702A Joint Tactical Information Distribution System 4	110	0604630A	Mial Development Program	4	3,618				n
	11	0604702A		4		4,267			מ

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Department of the Army FY 1989 R D T & E Program

Exhibit R-1

Appropriation: 2040 A Research Development Test & Eval Army

Date: February 1988

State Stat				i				Thousands of Dollars	f Dollars
0604710A Aight Vision Systems - Eng Dev 4 410 16.841 33.181 -7.369 0604710A Night Vision Systems - Eng Dev 4 6,021 15,128 22,630 -6,042 0604713A Aicraff Survivability Equipment 4 2,988 1,915 3,244 -806 0604713A Combat Peeding, Clothing, and Equipment 4 35,286 24,745 24,667 -5,077 0604712A Ron-System Training Devices - Eng Dev 4 7,886 2,974 4,687 -1,139 060472A Education and Training Devices - Eng Dev 4 7,886 2,974 4,689 -1,139 060472BA Becation Proper Detectors 4 7,786 2,974 4,689 -1,139 060472BA Becation Proper Detectors 4 7,786 2,974 4,684 -1,139 060473BA Heteorological Equipment and Systems Dev 4 1,126 1,417 4,84 -1,138 060473BA Project Sierra 4 1,759 59,20 1,615 -1,1	Lin No		Item Nomenclature	Act	FY 1967	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED e FY 1989 C
060471AA Aircraft Survivability Equipment 4 6,021 15,128 22,630 -6,042 060471AA Aircraft Survivability Equipment 4 2,988 1,915 32,630 -6,042 060471AA Combat Feeding, Clothing, and Equipment 4 2,988 1,915 32,630 -826 060471ABA Physical Security 4 7,886 2,974 4,884 -1,139 060472AA Education and Training Devices - Eng Dev 4 7,886 2,974 4,884 -1,139 060472AA Education and Training Systems 4 1,126 1,417 484 -1,139 060472AA Education and Training Systems 4 1,126 1,417 484 -1,139 060472AA Education and Training Systems 4 1,126 1,417 484 -1,139 060473AA Perciat Surveillance System - Eng Dev 4 1,126 1,417 484 -1,139 060473AA Immanned Aarial Vehicles - Eng Dev 4 1,524 59,50 1,618	112			*	410	16,841	33,181	-7,369	25.812 U
0604711A Aircraft Survivability Equipment 4 2,988 1,915 3,244 -826 0604713A Combat Feeding, Clothing, and Equipment 4 2,988 1,915 3,244 -826 0604713A Non-System Training Devices - Eng Dev 4 7,886 2,974 4,694 -1,139 060471BA Physical Security 4 7,886 2,974 4,694 -1,139 060472BA Physical Security 4 1,126 1,417 484 -1,139 060472BA Physical Security 4 1,126 1,417 484 -1,139 060472BA Perclocal Equipment and Systems 4 1,126 1,417 484 -1,139 060472BA Perclocal Equipment and Systems 4 1,126 1,417 484 -1,138 060473BA Project Sierra Amontel Phicles - Eng Dev 4 13,514 7,759 11,138 -11,138 060473A Altometic Test Equipment Device and Intelligence - Eng Dev 4 10,407 6,923 14,408	113			4	6,021	15,128	22,630	-6,042	16.588 U
0604713A Combat Peeding, Clothing, and Equipment 4 2,988 1,915 3,244 -826 2,4187 -826 2,4187 -826 2,4187 -826 2,179 19,790 0604715A Physical Security Physical Security 4 7,886 2,974 4,894 -1,139 3,755 060472A Actoation and Training Systems Development 4 1,126 1,417 4894 -1,139 3,755 060472A Actoation and Training Systems Development 4 1,126 1,417 4894 -1,139 3,755 060472A Actoation and Training Systems Development 4 1,126 1,417 4894 -1,139 4,151 060473A Arecorological Equipment and Systems 4 1,126 1,417 4894 -1,118 -1,111 4,11 060473A Project Sierra Actoation Weblicles - Eng Dev 4 13,514 7,759 14,408 -5,034 9,374 060474A Altomatic Test Equipment Development 4 10,407 6,923 14	114		Aircraft Survivability Equipment	4			18,283	-18,283	
0604715A Non-System Training Devices - Eng Dev 4 35,286 24,745 24,867 -5,077 19,790 0604718A Physical Security 4 7,886 2,974 4,894 -1,139 3,755 0604722A Education and Training Systems Development 4 4,170 5,396 6,889 -1,7 6,972 060472A Special Purpose Detectors 4 1,126 1,417 464 -1 483 060472A Meteorological Equipment and Systems 4 1,126 1,417 464 -1 483 060473A Meteorological Equipment and Systems 4 5,125 29,600 -29,600 -29,600 -29,600 060473A Project Sierra 1 37,514 7,759 11,138 -11,138 -11,138 060474A Arctical Surveillance System - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 060475A Automatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374 </td <td>115</td> <td></td> <td>Combat Feeding, Clothing, and Equipment</td> <td>4</td> <td>2,988</td> <td>1,915</td> <td>3,244</td> <td>-826</td> <td></td>	115		Combat Feeding, Clothing, and Equipment	4	2,988	1,915	3,244	-826	
0604718A Physical Security 4 7,886 2,974 4,694 -1,139 3,755 0604722A Education and Training Systems Development 4 4,170 5,396 6,889 -17 6,875 0604723A Special Purpose Detectors 4 1,126 1,417 484 -1 483 0604726A Heteorological Equipment and Systems 4 1,126 1,417 484 -1 483 0604736A Heteorological Equipment and Systems 4 3,723 592 1,615 -4 1,611 0604736A Project Sierra 4 3,723 592 1,615 -4 1,611 0604736A Project Sierra 10,804 4 13,514 7,759 11,138 -11,138 0604740A Alt Defense Command, Control and Intelligence - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 060475A Automatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374	116		Non-System Training Devices - Eng Dev	4	35,286	24,745	24,867	-5,077	
0604723A Education and Training Systems Development 4 4,170 5,36 6,689 -17 6,872 0604723A Special Purpose Detectors 4 1,126 1,417 484 -1 483 0604726A Heteorological Equipment and Systems 4 1,126 1,417 484 -1 483 0604736A Remotely Piloted Vehicles - Eng Dev 4 5,151 29,600 -29,600 -29,600 -29,600 0604737A Unmanned Aerial Vehicles - Eng Dev 4 13,514 7,759 -11,138 -11,138 -11,138 0604740A Tactical Surveillance System - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 060475A Automatic Test Equipment Development Devel	117	. 0604718A	Physical Security	4	7,886	2,974	4,894	-1,139	3,755 U
0604726A Special Purpose Detectors 4 1,126 1,417 484 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 488 -1 1 488 -1 1 488 -1 1<	18		Education and Training Systems Development	4	4,170	5,396	6,889	-17	6,872 U
0604726A Heteorological Equipment and Systems 4 3,723 592 1,615 -4 1,611 0604730A Remotely Plioted Vehicles - Eng Dev 4 65,151 29,600 -29,600 -29,600 0604736A Project Sierra 0604736 Project Sierra 11,138 -11,138 -11,138 -11,138 0604740A Tactical Surveillance System - Eng Dev 4 13,514 7,759 167,254 -68,963 98,291 0604741A Air Defense Command, Control and Intelligence - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 0604750A Tactical Electronic Countermeasures - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 060475A Classified Program (Eng) 4 10,407 6,923 14,408 -5,034 9,374 060475A Classified Program (Eng) 4 10,407 6,923 14,408 -5,034 9,374 060475A Hedical Chemical Defense Life Support Haterial 4 9,094 7,633 8,529<	119		Special Purpose Detectors	4	1,126	1,417	484	1-	483 U
0604730A Remotely Piloted Vehicles - Eng Dev 4 65,151 29,600 -29,600 0604736A Project Sierra 4 13,514 7,759 11,138 -11,138 0604730A Tactical Surveillance System - Eng Dev 4 13,514 7,759 -68,963 98,291 0604740A Air Defense Command, Control and Intelligence - Eng Dev 4 37,547 90,262 167,254 -68,963 98,291 0604750A Automatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374 0604750A Tactical Electronic Countermeasures - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 0604750A Classified Program (Eng) 4 9,094 7,633 8,529 -2,271 6,258	20		Meteorological Equipment and Systems	4	3,723	592	1,615	4-	1,611 U
0604737A Unmanned Aerial Vehicles - Eng Dev 4 0604737A Unmanned Aerial Vehicles - Eng Dev 4 0604741A Air Defense Command, Control and Intelligence - 4 37,547 90,262 167,254 -68,963 98,291 0604741A Air Defense Command, Control and Intelligence - 4 37,547 90,262 167,254 -68,963 98,291 0604741A Air Defense Command, Control and Intelligence - 4 37,547 90,262 167,254 -68,963 98,291 0604741A Automatic Test Equipment Development 0604750A Tactical Electronic Countermeasures - Eng Dev 4 10,407 6,923 14,408 -5,034 9,374 0604757A Medical Chemical Defense Life Support Material 4 9,094 7,633 8,529 -2,271 6,258 0604766A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666	121		Remotely Piloted Vehicles - Eng Dev	4	65,151		29,600	-29,600	מ
0604737A Unmanned Aerial Vehicles - Eng Dev 4 13,514 7,759 0604740A Tactical Surveillance System - Eng Dev 4 13,514 7,759 0604741A Air Defense Command, Control and Intelligence - Eng Dev 4 37,547 90,262 167,254 -68,963 98,291 0604746A Autcomatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374 0604750A Tactical Electronic Countermeasures - Eng Dev 4 9,094 7,633 8,529 -2,271 6,258 0604757A Medical Chemical Defense Life Support Material 4 9,094 7,633 8,529 -2,271 6,258	122		Project Sierra	•					
0604740A Tactical Surveillance System - Eng Dev 4 13,514 7,759 0604741A Air Defense Command, Control and Intelligence - Eng Dev 4 37,547 90,262 167,254 -68,963 98,291 0604746A Automatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374 0604750A Tactical Electronic Countermeasures - Eng Dev 4 9,094 7,633 8,529 -2,271 6,258 0604757A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666	23		Unmanned Aerial Vehicles - Eng Dev	4			11,138	-11,138	D
0604741A Air Defense Command, Control and Intelligence - 4 4 37,547 90,262 167,254 -68,963 98,291 0604746A Automatic Test Equipment Development 4 10,407 6,923 14,408 -5,034 9,374 0604750A Tactical Electronic Countermeasures - Eng Dev 4 4 9,094 7,633 8,529 -2,271 6,258 0604757A Medical Chemical Defense Life Support Material 4 9,094 7,633 8,529 -2,271 6,258	24	0604740A	Tactical Surveillance System - Eng Dev	•	13,514	7,759			
060476A Automatic Test Equipment Development 0604750A Tactical Electronic Countermeasures - Eng Dev	25		igence	4	37,547	90,262	167,254	-68,963	98,291 U
0604750A Tactical Electronic Countermeasures - Eng Dev 4 0604754A Classified Program (Eng) 0604757A Medical Chemical Defense Life Support Material 4 9,094 7,633 8,529 -2,271 6,258 0604766A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666	26		Automatic Test Equipment Development	4	10,407	6,923	14,408	-5,034	9,374 18
0604754A Classified Program (Eng) 4 9,094 7,633 8,529 -2,271 6,258 0604766A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666 1604766A 1604766A 1604766A 1604766A 1604766A	27		- Eng	4					
0604757A Medical Chemical Defense Life Support Material 4 9,094 7,633 8,529 -2,271 6,258 0604766A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666	28		Classified Program (Eng)	4					
0604766A Tactical Electronic Surveillance System - Eng Dev 4 15,727 18,666	29	•	Medical Chemical Defense Life Support Material	4	9,094	7,633	8,529	-2,271	6.258 1
	30			4	15,727	18,666			

UNCLASSIFIED

Department of the Army FY 1989 R D T & E Program

Appropriation: 2040 A Research Development Test & Eval Army

Exhibit R-1

Program						Thousands of	of Dollars
		i				Tiousailus Ol	DOLLARS
	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED 6' FY 1989 C
131 0604770A	Joint Surveillance/Target Attack Radar System	4	26,546	18,224	15,430	3,752	19,182 11
132 0604779A	Joint Interoperability of Tactical Command & Control Systems (JINTACCS)	4	13,864	14,860	17,828	99-	17,784
133 0604801A	Aviation - Eng Dev	4	9,440	9,903	13,089	-2,060	11.029
134 0604802A	Weapons and Munitions - Eng Dev	4	102,493	110,855	133,919	-1,324	132,595 U
135 0604803A	Chemical Systems - Eng Dev	4		14,191	29,370	8,279	37,649
136 0604804A	Logistics and Engineer Equipment - Eng Dev	•	17,222	11,886	18,150	-4,573	13,577
137 0604805A	Command, Control, Communications Systems - Eng Dev	4	18,926	13,858	10,356	-45	10.311
138 0604806A	Chemical/Biological Defense Equipment - Eng Dev	4	38,312	22,905	20,205	-6.943	
	Medical Materiel/Medical Biological Defense Equipment - Eng Dev	4	11,524	13,327	17,998	-4,173	13,825 U
140 0604808A	Landmine Warfare/Barrier - Eng Dev	~	19,679	14,703	14,969	-130	14.839
141 0605710A	Joint CB Point of Contact, Test and Assessment	4	5,953	6,403	6,531	-564	11.296.5
142 0203726A	Adv Field Artillery Tactical Data System	•	10,301	14,797	25,753	-8.036	117.71
143 0203735A	Combat Vehicle Improvement Programs	4	78,720	122,746	81,170	1,667	82.837 II
0203739A	Air Defense C21 Mods	4		4,000	18,833	-10,172	
0203740A	Maneuver Control System	4	12,576	13,971	12,004	-32	
0203743A	155mm Self-Propelled Howitzer Improvements	4	37,642	29,988	24,513	-4,569	19,944 U
0203744A	Aircraft Modifications/Product Improvement Programs	₹.		55,000	4,832	130,628	135,460 U
0203745A	Weapons and Munitions Equipment Upgrade Program	4	39,683	26,327	4,845	-12	4,833 U
0203751A	Special Operations Forces Equipment	4	41,860		29,829	-29,829	

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Department of the Army FY 1989 R D T & E Program

Exhibit R-1 Date: February 1988

Appropriation: 2040 A Research Development Test & Eval Army

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Program Line Element No Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989	S AMENDED e
150 0203752A	Aircraft Engine Component Improvement Program	•	2.631	441.3	111		
151 0203801A	Missile/Air Defense Product Improvement	•	41.385	33 040	64 250	0/1/5	11,914 U
152 0203802A	Other Missile Product Improvement Progra	4	14.022	40.000	04/359	066,62-	D 600'6E
153 0208010A		4	17,770	12,998	13.958	9, 349 - 67	13 603 U
154 0303145A	5A EUCOM C3 Systems	4	1,038	1,289	636	22	
155 1110011A	IA Force Enhancements-Active	4	150	95,500		118,408	118,408 U
Tacti	Tactical Programs		1,971,227	2,294,469	3,264,368	-611.253	2,653,116
156 0604201A	IA Aircraft Avionics	S	168				2710001
157 0604716A	5A Happing and Geodesy - Eng Dev	2	264	6,459	6,488		0 488 11
158 0604778A	3A NAVSTAR Global Positioning System (User Equipment)	ı,	4,494	9,995	8,803		
159 0301307A	7A Foreign Science and Technology Center	S.					
160 0301318A	A HUMINT (Controlled)	S	•				
161 0301327A	A Technical Reconnaissance and Surveillance	S					
162 0301334A	A Other Commands GDIP Activities	ស					
163 0301359A	A Special Army Program	LC)					
164 0303126A	A Long-Haul Communications (DCS)	vo.	2,116	٠			
165 0303142A	A SATCOM Ground Environment	ĸ	71,418	74,966	46,694	-19,996	26.698 11
166 0303401A	A Communications Security (COMSEC)	മ	6,001	5,217	5,126		5,126 U
Intell	Intelligence and Communications		95,429	107,718	74,899	-22.496	50.403
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Department of the Army FY 1989 R D T & E Program

Exhibit R-1

FY 1989 R D T Appropriation: 2040 A Research Development Test & Eval Army

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Number Item Nomenclature Act FY 1987 FY 1988 RRES 1989 PR 1988 RRES 1989 PR 19				i				Thousands of	f Dollars
Number Item Nomenclature Act FY 1987 FY 1988 PFESS BUDGES 0 660390A MAYO Research and Development 6 151,081 150,729 184,957 0 660530LA Kwajalein Hissile Range 6 151,081 150,729 184,957 0 660530LA Army Test Ranges and Pacilities 6 151,081 150,729 184,957 0 660550LA Army Test Ranges and Pacilities 6 19,562 62,500 79,182 0 660560LA Army Test Ranges and Pacilities 6 19,562 62,500 79,182 0 660560LA Army Test Ranges and Pacilities 6 19,562 62,500 79,182 0 66050LA Army Test Ranges and Pacilities 6 16,680 19,195 20,152 0 66050LA Army Test Ranges and Pacilities 6 14,052 59,186 73,186 0 660570LA Materiel Systems Analysis 6 14,175 49,796 61,484 0 660570LA Braport of Operational Testing 6 14,175 49,796 61,484 <t< th=""><th>Lin</th><th></th><th></th><th></th><th></th><th></th><th>FY 88/89</th><th></th><th>9</th></t<>	Lin						FY 88/89		9
0 605390A NNYO Research and Development 6 39,383 0 60530LA Kvajalain Hissile Range 6 151,081 150,729 184,957 0 60550LA Army Test Ranges and Facilities 6 37,462 19,103 209,732 0 60550LA Army Test Ranges and Facilities 6 236,620 19,103 209,732 0 60550LA Army Test Ranges and Facilities 6 19,562 62,500 79,182 0 60550LA Army Test Ranges and Facilities 6 16,680 19,103 209,732 0 60550A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0 60550A Army User Test Instrumentation and Threat 6 21,994 22,264 26,413 0 60550A Material Systems Analysis 6 21,994 22,264 26,413 0 60550A Propertion of Operational Testing 6 44,175 49,796 61,484 0 60550A Propertional Cooperational Testing 6 21,994 22,264 26,413 0 60550A	2		Item Nomenclature	Act	FY 1987	FY 1988	PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED e FY 1989 C
0.605301A Kwajalein Hissile Range 6 151,081 150,729 184,957 0.605502A Small Business Innovative Research 6 37,462 236,620 19,103 209,732 0.605601A Army Test Ranges and Facilities 6 236,620 19,103 209,732 0.605602A Army Technical Test Instrumentation and Threat 6 19,562 62,500 79,182 0.605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0.605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0.605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0.605702A Army User Test Instrumentation and Test Instrumentation and Development 6 14,195 20,155 0.605702A Army User Test Instrumentation and Development 6 74,915 44,362 0.605702A Army User Test Instrumentation and Development 6 7,994 17,944 0.605702A Army User Test Vondevelopmental Items 6	.67	0603790A	NATO Research and Development	9	39,383			and the the tab tab tab the tab	
0605501A Anil Business Innovative Research 6 37,462 0605601A Army Test Ranges and Pacilities 6 239,620 191,103 209,732 0605601A Army Technical Test Instrumentation and Threat 6 19,562 62,500 79,182 0605603A Army User Test Instrumentation and Threat 6 19,562 62,500 79,182 0605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0605702A Army User Test Instrumentation and Threat 6 21,994 22,264 26,413 0605702A Material Systems Analysis 6 21,994 22,264 26,413 0605712A Support of Operational Testing 6 44,175 49,796 61,404 0605712A Support of Operation Exercises and Activities 6 74,091 82,349 87,835 0605803A Technical Information Exercises and Activities 6 5,213 5,500 6,403 0605803A Productivity Investments 6 7,409 17,842 9,281 <td>69</td> <td>. 0605301A</td> <td>Kwajalein Missile Range</td> <td>ø</td> <td>151,081</td> <td>150,729</td> <td>184.957</td> <td>-20 102</td> <td></td>	69	. 0605301A	Kwajalein Missile Range	ø	151,081	150,729	184.957	-20 102	
0605601A Army Test Ranges and Facilities 6 239,620 191,103 209,732 0605602A Army Technical Test Instrumentation and Targets 6 19,562 62,500 79,182 0605603A Army User Test Instrumentation and Threat 6 19,562 59,186 73,188 0605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0605702A Material Systems Analysis 6 21,994 22,264 26,413 060570A Material Systems Analysis 6 21,994 22,264 26,413 060570A Material Systems Analysis 6 3,800 4,390 4,362 060571A Support of Operational Testing 6 74,091 82,349 87,835 0605801A Programvide Activities 6 5,213 5,500 6,403 0605801A Munitions Standardization Effectiveness and Sasety 6 5,213 10,331 16,185 0605801A Productivity Investments 6 24,069 31,306 8,230 <td>69</td> <td>0605502A</td> <td>Small Business Innovative Research</td> <td>9</td> <td>37,462</td> <td></td> <td></td> <td>707107</td> <td>n cca/sor</td>	69	0605502A	Small Business Innovative Research	9	37,462			707107	n cca/sor
0605602A Army Tachnical Test Instrumentation and Targets 6 19,562 62,500 79,182 0605603A Army User Test Instrumentation and Threat 6 40,625 59,186 73,188 0605702A Army User Test Instrumentation and Threat 6 16,680 19,195 20,155 0605702A Material Systems Analysis 6 16,680 4,390 4,362 0605703A Material Systems Analysis 6 21,994 22,264 26,413 0605702A Material Systems Analysis 6 44,175 49,796 61,484 0605801A Programwide Activities 6 74,091 82,349 87,835 0605801A Programwide Activities 6 5,213 5,500 6,403 0605801A Trannational Information Activities 6 5,213 5,500 6,403 0605801A Horbital Information Medician Information Activities 6 5,213 5,500 6,403 0605801A Productivity Investments 6 10,593 17,30 17,106	70	0605601A	Army Test Ranges and Facilities	9	238,620	191,103	209,732	-18.716	ם אנט נטנ
0.605503A	11	0605602A		9	19,562	62,500	79,182	-19,072	0 010/177
0605702A Meteorological Support to RDTeR Activities 6 16,680 19,195 20,155 0605706A Material Systems Analysis 6 21,994 22,264 26,413 0605705A Exploitation of Foreign Items 6 3,800 4,362 26,413 0605702A Support of Operational Testing 6 74,091 82,349 87,835 0605801A Programwide Activities 6 74,091 82,349 87,835 0605802A International Cooperation Research and Development 6 74,091 82,349 87,835 0605803A Technical Information Activities 6 5,213 5,500 6,403 0605803A Munitions Standardization, Effectiveness and Safety 6 7,984 17,842 8,283 0605803A Productivity Investments 6 24,069 35,000 11,1106 0605894A Real Property Maintenance - RDTeR 6 157,812 155,000 171,106 0605895A Base Operations - RDTeR 6 181,679 177,500 189,524	72	0605603A	Army User Test Instrumentation and Threat Simulators	9	40,625	59,186	73,188	-9,252	
0605706A Materiel Systems Analysis 6 21,994 22,264 26,413 0605703A Exploitation of Foreign Items 6 3,800 4,390 4,362 0605712A Support of Operational Testing 6 44,175 49,796 61,484 0605801A Programwide Activities 6 74,091 82,349 87,835 0605802A International Cooperative Research and Development 6 5,213 5,500 6,403 0605803A Technical Information Activities 6 5,213 5,500 6,403 0605805A Munitions Standardization, Effectiveness and Safety 6 7,984 17,842 8,283 0605804A Roductivity Investments 6 24,069 35,000 17,106 0605895A Real Property Maintenance - RDTGE 6 187,812 155,000 171,106 0605895A Base Operations - RDTGE 6 181,679 17,500 171,106 0605896A Base Operations - RDTGE 6 181,679 9,501 17,175	73	.0605702A	Meteorological Support to RDISE Activities	9	16,680	19,195	20,155	-1.267	1 888 1
0605709A Exploitation of Poreign Items 6 3,800 4,362 4,362 -	74	0605706A	Materiel Systems Analysis	•	21,994	22,264	26,413	-2.630	
0605801A Support of Operational Testing 6 44,175 49,796 61,484 0605801A Programwide Activities 6 74,091 82,349 87,835 0605802A International Cooperative Research and Development 6 5,213 5,500 6,403 0605803A Technical Information Activities 6 5,213 5,500 6,403 0605805A Munitions Standardization, Effectiveness and Safety 6 10,593 14,331 16,185 0605807A Productivity Investments 6 24,069 35,000 31,576 0605894A Real Property Maintenance - RDTgE 6 187,812 155,000 171,106 0605896A Base Operations - RDTgE 6 181,679 177,500 189,524 0605896A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	75	0605709A	Exploitation of Foreign Items	9	3,800	4,390	4,362	- 3	
0605801A Programwide Activities 6 74,091 82,349 87,835 0605802A International Cooperative Research and Development 6 932 1,093 1,136 0605802A Trechnical Information Activities 6 5,213 5,500 6,403 0605805A Munitions Standardization, Effectiveness and Safety 6 10,593 14,331 16,185 0605810A RDT&E Support for Nondevelopmental Items 6 7,984 17,842 8,283 0605892A Productivity Investments 6 24,069 35,000 171,106 0605894A Real Property Maintenance - RDT&E 6 157,812 155,000 171,106 0605895A Base Operations - RDT&E 6 181,679 177,500 189,524 0605899A Hanagement Headquarters (Research and Development) 6 12,106 9,501 13,727	92	0605712A	Support of Operational Testing	9	44,175	49,796	61,484	-10.135	0 000/1
0605802A International Cooperative Research and Development 6 932 1,093 1,136 0605803A Technical Information Activities 6 5,213 5,500 6,403 0605805A Munitions Standardization, Effectiveness and Safety 6 10,593 14,331 16,185 -3 0605810A RDTEE Support for Nondevelopmental Items 6 7,984 17,842 8,283 0605812A Productivity Investments 6 24,069 35,000 31,576 18 0605895A Real Property Maintenance - RDTEE 6 181,679 177,500 171,106 -9 0605896A Base Operations - RDTEE 6 181,679 177,500 189,524 -5 0605898A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	11	0605801A	Programwide Activities	9	74,091	82,349	87,835	-4.680	ח השנייוני
0605803A Technical Information Activities 6 5,213 5,500 6,403 0605805A Munitions Standardization, Effectiveness and Safety 6 10,593 14,331 16,185 -3 0605810A RDTEE Support for Nondevelopmental Items 6 24,069 35,000 31,576 18 0605892A Real Property Maintenance - RDTEE 6 157,812 155,000 171,106 -9 0605896A Base Operations - RDTEE 6 181,679 177,500 189,524 -5 0605896A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	8	0605802A		9	932	1,093	1,136		ם בפדורם
0605805A Munitions Standardization, Effectiveness and Safety 6 10,593 14,331 16,185 -3 0605810A RDTeE Support for Nondevelopmental Items 6 7,984 17,842 8,283 0605872A Productivity Investments 6 24,069 35,000 31,576 18 0605894A Real Property Maintenance - RDTeE 6 157,812 155,000 171,106 -9 0605896A Base Operations - RDTeE 6 181,679 177,500 189,524 -5 0605899A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	6	0605803A	Technical Information Activities	9	5,213	5,500	6,403	009-	1, 1909 H
0605810A RDT&E Support for Nondevelopmental Items 6 7,984 17,842 8,283 0605872A Productivity Investments 6 24,069 35,000 31,576 0605894A Real Property Maintenance - RDT&E 6 157,812 155,000 171,106 0605896A Base Operations - RDT&E 6 181,679 177,500 189,524 0605898A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	0	0605805A	Standardization, Effectiveness	9	10,593	14,331	16,185	-3.204	
0605892A Productivity Investments 6 24,069 35,000 31,576 0605894A Real Property Maintenance - RDTsE 6 157,812 155,000 171,106 0605896A Base Operations - RDTsE 6 181,679 177,500 189,524 0605898A Management Headquarters (Research and Development) 6 12,106 9,501 13,727	-	0605810A	RDTEE Support for Nondevelopmental Items	9	7,984	17,842	8,283		
0605894A Real Property Maintenance - RDT&E 6 157,812 155,000 171,106 0605896A Base Operations - RDT&E 6 181,679 177,500 189,524 0605899BA Management Headquarters (Research and Development) 6 12,106 9,501 13,727	N .	0605872A	Productivity Investments	9	24,069	35,000	31,576	18,371	
0605896A Base Operations - RDr&E 6 181,679 177,500 189,524 0605898A Management Headquarters (Research and Development) 6 12,106 9,501 13,727		0605894A	Real Property Maintenance - RDT&E	9	157,812	155,000	171,106	-9,132	
U605898A Management Headquarters (Research and Development) 6 12,106 9,501 13,727		U605896A	Base Operations - RDT&E	9	181,679	177,500	189,524	-5,816	183,708 U
		0605898A	Management Headquarters (Research and Development)	9	12,106	9,501	13,727	-111	13.616 11

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Department of the Army FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1 Appropriation: 2040 A Research Development Test & Eval Army

Thousands of Dollars	FY 1989 AMENDED e JUSTMENT FY 1989 C	163 19,852 U	1,118,752	145 5.030.700
Thousan	FY 1989 ADJUSTMENT	-2,163	-88,511	-942,145
	FY 88/89 PRES BUDGET FY 1989 AD	22,015	1,207,263	5,972,845
	FY 1988	20,904	1,078,183	4,670,659
	FY 1987	27,993	1,115,854	4,699,035
,	Act	vo		
	Item Nomenclature	186 0708011A Industrial Preparedness	ssion Support	Total Research Development Test & Eval Army
	Program Line Element No Number	0708011A Indu	Defensewide Mission Support	1 Research Devel

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Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

	Summary			Date: Fe	February 1988
				Thousands o	of Dollars
Summary Recap of Research Categories	FY 1987	FY 1968	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED FY 1989
Research Exploratory Development Advanced Development Engineering Development Management and Support	353,140 431,981 1,872,666 4,594,985 588,813	342,016 407,951 2,664,694 4,360,394 581,206	417,277 477,149 3,305,201 3,920,101 636,244	-60,525 -61,262 -1,378,777 653,261 -52,351	356,752 415,887 1,926,424 4,573,362 583,893
Research and Development (FYDP Program 6) Operational Systems Development	7,841,585	8,356,261 1,156,656	8,755,972	-899,654	7,856,318
Total Research Development Test & Eval Navy Summary Recap of Budget Activities	9,292,433	9,512,917	10,044,819	-828,619	9,216,200
Technology Base Advanced Technology Development Strategic Programs Tactical Programs Intelligence and Communications Defensewide Mission Support	785,121 143,949 1,813,145 5,173,554 525,769 750,895	749,967 233,356 1,253,122 5,663,856 700,563	894,426 297,745 894,391 6,207,442 7773,576	-121,787 -93,721 -113,380 -215,002 -225,526	772,639 204,024 781,011 5,992,440 714
Total Research Development Test & Eval Navy Summary Recap of FYDP Programs	9,292,433	9,512,917	10,044,819	-828,619	9,216,200
100-1466	210,266 702,742 499,879 7,841,585 37,961	180,711 393,386 520,894 8,356,261 42,331	210,736 499,943 532,216 8,755,972 45,952	-39,670 19,170 74,274 -899,654 -2,470	171,066 519,113 606,490 7,856,318 43,482 19,731
Total Research Development Test & Eval Navy	9,292,433	9,512,917	10,044,819	-828,619	9,216,200

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Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

Date: February 1988 Appropriation: 1319 N Research Development Test & Eval Navy

				1				Thousands of Dollars	Dollars
10 601103N University Research Initiatives 1 10,590 22,627 23,763 -24,603 20,60115N University Research Initiatives 1 23,320 22,627 23,763 -24,603 3060115N Defense Research Sciences 1 23,320 319,380 368,911 -35,922 33,060115N Anti-Air Warfare Technology 1 14,724 12,939 368,911 -35,922 360,011N Anti-Air Warfare Technology 1 12,349 12,953 13,976 -692 -15,098 -15	Line No		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
2 0601152N In-House Independent Laboratory Research 1 23,320 22,627 23,763 10015152N In-House Independent Laboratory Research Sciences 1 19,289 368,911 −35,922 3 060211N Anti-Air Warfare/Anti-Burface Warfare Technology 1 64662 54,273 69,100 −13,701 −13,701 14,724 15,096 −15,096 −15,096 −15,096 060211N Surface Ship Technology 1 14,724 15,040 15,096 −15,096 −15,096 060212N Surface Ship Technology 1 14,724 15,040 15,096 −15,096 −15,096 060212N Aircraft Technology 1 14,724 15,040 15,283 −1,060 19,558 −1,060 060223N Aircraft Technology 1 14,843 15,915 16,283 −1,060 19,558 −1,060 060223N Kission Support Technology 1 18,536 56,000 11,325 −1,3851 060223N Kission Support Technology 1 18,526 56,000 17,325 −1,3851 060233N Mine and Special Warfare Technology 1 13,487 14,009 15,381 −2,235 060233N Mine and Special Warfare Technology 1 13,487 14,123 15,417 −963 100232N Nordear Propulsion 1 14,156 15,301 14,123 15,417 −963 100232N Mine and Athospheric Support Technology 1 14,156 15,301 16,302 16,417 −963 100233N Independent Exploratory Development 1 14,124 15,390 16,390 −1,175 17 17 17 17 17 17 17 17 17 17 17 17 17	-	0601103N	University Research Initiatives	-	10,590		24.603	-24.603	
9 0601153M Defense Research Sciences 1 319,230 319,389 366,911 -35,922 3 1 0602111M Anti-Air Warfare/Anti-Burface Warfare Technology 1 64,662 54,273 69,100 -13,701 0 602113M Anti-Air Warfare Technology 1 12,349 12,933 13,976 -692 0 602121M Surface Ship Technology 1 12,349 12,933 13,976 -692 0 602121M Aircraft Technology 1 12,349 15,010 15,098 -15,098 0 602221M Aircraft Technology 1 14,843 15,915 15,096 -1,764 0 602221M Aircraft Technology 1 14,843 15,915 1,734 -1,764 0 602231M Mission Support Technology 1 14,843 15,915 1,734 -1,744 0 602231M Mission Support Technology 1 60,256 56,000 11,325 -1,540 0 602231M Aiswarine Technology 1 13,647 14,262 14,499 1	~	0601152N	In-House Independent Laboratory Research	H	23,320	22.627	23.763		60
0602111N Anti-LAir Warfare/Anti-Burface Warfare Technology 1 64,662 54,273 69,100 -13,701 060212N Surface Ship Technology 1 14,724 12,953 13,976 -15,098 060212N Aircraft Technology 1 12,349 12,953 13,976 -56.0 060212N Aircraft Technology 1 19,729 20,700 19,558 -5,910 060213N Aircraft Technology 1 14,724 15,915 16,08 -1,060 060213N Aircraft Technology 1 14,483 15,915 16,283 -1,060 060223N Command, Control, and Communications Technology 1 14,836 16,000 21,734 -7,784 060223N Mission Support Technology 1 86,216 56,000 71,325 -13,601 060231N Airsion Support Technology 1 86,219 92,569 94,276 -2,235 060232N Nuolear Propulsion 1 12,201 14,909 15,391 -2,235 <t< td=""><td>m</td><td>0601153N</td><td>Defense Research Sciences</td><td>-</td><td>319,230</td><td>319,389</td><td>368.911</td><td>-36.000</td><td>237 703</td></t<>	m	0601153N	Defense Research Sciences	-	319,230	319,389	368.911	-36.000	237 703
600113N Electronic Warfare Tachnology 1 14,724 15,098 -15,098 060212N Surface Ship Tachnology 1 12,349 12,953 13,976 -692 060212N Aircraft Tachnology 1 19,729 20,700 19,558 2,910 060213N Aircraft Tachnology 1 14,843 15,915 16,080 2,910 060223N Command, Control, and Communications Tachnology 1 14,843 15,915 16,080 2,734 -7,784 060223N Mission Support Tachnology 1 60,256 56,000 21,734 -7,784 060231AN Aissans Support Tachnology 1 60,256 56,000 71,325 -13,651 060231AN Aissan Support Tachnology 1 13,887 14,909 15,381 -2,235 060232AN Muchaer Propulsion 1 12,201 14,123 15,477 -963 060232AN Nuclear Propulsion 1 26,124 25,727 26,995 -1.24 06023	4	0602111N		਼ ਜ	64,662	54,273	001.69	-13.701	236,366
0602121N Surface Ship Technology 1 12,349 12,953 13,976 -692 1,060 19,558 2,910 1,0602121N Aircraft Technology 1 19,729 20,700 19,558 2,910 1,0602131N Amerine Corps Landing Force Technology 1 14,843 15,915 16,283 -1,060 1,0602234N Aission Support Technology 1 33,745 28,000 21,734 -7,784 -7,784 0602234N Aission Support Technology 1 33,745 28,000 71,325 -1,540 -2,235 0602234N Aission Support Technology 1 13,887 14,909 15,381 -2,235 0602324N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 0602324N Nuclear Propulsion 1 26,124 25,727 26,995 -1,175 1 14,124 15,390 16,979 -1,175 1 14,124 3,675 3,708 -3,708	VO.	0602113N	Electronic Warfare Technology	-	14,724		15,098	-15,098	AAC ' CC
0602123N Aircraft Technology 1 19,729 20,700 19,558 2,910 10,60213N Marine Corps Landing Force Technology 1 14,843 15,915 16,283 -1,060 19,558 2,910 10,60223N Command, Control, and Communications Technology 1 18,536 16,000 21,734 -7,784	9	0602121N	Surface Ship Technology	1	12,349	12,953	13,976	-692	13,284
0602131M Marine Corps Landing Force Technology 1 14,843 15,915 16,283 -1,060 1,784 -7,784 -	~	0602122N	Aircraft Technology	-	19,729	20,700	19,558	2,910	22,468
0602232N Hission Support Technology 1 18,536 16,000 21,734 −7,784 0602234N Systems Support Technology 1 33,745 28,000 30,595 −1,540 0602314N ASW Technology 1 13,887 14,909 15,381 0602315N Wine and Special Warfare Technology 1 12,201 14,123 15,477 −963 0602324N Submarine Technology 1 12,201 14,123 15,477 −963 0602324N Nuclear Propulsion 1 26,124 25,727 26,995 −1,175 Technology Base 7 14,909 15,390 16,979 −1,175 Technology Base 2 3,708 −3,708	6	0602131M	Marine Corps Landing Force Technology	1	14,843	15,915	16,283	-1,060	15.223
0602234N Mission Support Technology 1 33,745 28,000 30,595 -1,540 0602234N Systems Support Technology 1 60,256 56,000 71,325 -13,851 0602315N ASW Technology 1 85,219 92,569 94,276 -2,235 0602315N Mine and Special Warfare Technology 1 13,887 14,909 15,381 -2,235 0602323N Submarine Technology 1 12,201 14,123 15,477 -963 0602343N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -1.24 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1.175 1 Technology Avionics 2 3,344 3,675 3,708 -3,708	•	0602232N	Command, Control, and Communications Technology	-	18,536	16,000	21,734	-7,784	13,950
0602314N Systems Support Technology 1 60,256 56,000 71,325 -13,851 0602314N ASW Technology 1 85,219 92,569 94,276 -2,235 0602315N Mine and Special Warfare Technology 1 13,887 14,909 15,381 -96.3 0602324N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -1.175 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1.175 Technology Base Technol	_	0602233N	Hission Support Technology	-	33,745	28,000	30,595	-1,540	29.055
0602315N ASW Technology 1 85,219 92,569 94,276 -2,235 92,041 0602315N Mine and Special Warfare Technology 1 13,887 14,909 15,381 15,381 0602323N Submarine Technology 1 12,201 14,123 15,477 -963 14,513 0602324N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 44,423 0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -124 26,871 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1.175 15,804, Technology Base 785,121 749,967 894,426 -121,787 772,639 0603202N Avionics 2 3,708 -3,708		0602234N	Systems Support Technology	1	60,256	26,000	71,325	-13,851	57.474 11
0602315N Mine and Special Warfare Technology 1 13,887 14,909 15,381 15,381 15,381 15,381 15,381 15,381 15,381 15,381 15,381 16,312 16,312 15,377 -963 14,514 14,514 14,123 50,372 -5,949 44,423 44,423 44,423 44,423 44,423 44,423 46,423<		0602314N	ASW Technology	-	85,219	92,569	94,276	-2,235	
0602323N Submarine Technology 1 12,201 14,123 15,477 -963 14,514 0602324N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 44,423 0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -124 26,871 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1,175 15,804 Technology Base 785,121 749,967 894,426 -121,787 772,639 0603202N Avionics 2 3,708 -3,708 -3,708		0602315N	Mine and Special Warfare Technology	7	13,887	14,909	15,381		18, 381
0602324N Nuclear Propulsion 1 41,582 41,392 50,372 -5,949 44,423 0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -124 26,871 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1,175 15,804 Technology Base 785,121 749,967 694,426 -121,787 772,639 0603202N Avionics 2 3,708 -3,708		0602323N	Submarine Technology	1	12,201	14,123	15,477	E96-	14.514 11
0602435N Ocean and Atmospheric Support Technology 1 26,124 25,727 26,995 -124 26,871 0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1,175 15,804 Technology Base 785,121 749,967 894,426 -121,787 772,639 0603202N Avionics 2 3,344 3,708 -3,708		0602324N	Nuclear Propulsion	7	41,582	41,392	50,372	-5.949	44.423
0602936N Independent Exploratory Development 1 14,124 15,390 16,979 -1,175 15,804 Technology Base 785,121 749,967 894,426 -121,787 772,639 0603202N Avionics 2 3,344 3,675 3,708 -3,708		0602435N	Ocean and Atmospheric Support Technology	-	26,124	25,727	26,995	-124	
Technology Base 785,121 749,967 894,426 -121,787 0603202N Avionics 2 3,344 3,675 3,708 -3,708		0602936N	Independent Exploratory Development	~	14,124	15,390	16,979	-1,175	15,804, U
Avionics 2 3,344 3,675 3,708 -3,708		Technolog	y Base	•	785,121	749,967	894,426	-121,787	772.639
		0603202N	Avionics	~	3,344	3,675	3,708	-3,708	

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Appropriation: 1319 N Research Development Test & Eval Navy

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Date: February 1988

Marcaft Propulation 2 3,786 FY 1989 FY 1980	No No								
Manual Engineering		Line Blement					FY 88/89	0001	S
Advanced Anti-Submarine Harfare Technology Dewonout of Autonology Development Advanced Anti-Submarine Harfare Technology Development Advanced Anti-Submarine Harfare Technology Development Advanced Anti-Submarine Marfare Technology Development Advanced Technology		Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 1989	ADJUSTMENT	
Advanced Altcraft Subsystems 2		0603210N	Aircraft Propulsion	8	3,786	5,760	7,283	-125	7,158 U
Naval Alrahip 2 6,743 24,467 62,376 -62,376 EN Technology		0603217N	Advanced Aircraft Subsystems	8	5,324	11,555	21,709	-7,200	
EN Technology 2 11,563 12,197 1 Electromagnetic Radiation Source Elimination 2 7,252 5,585 12,884 -6,832 1 Electromagnetic Radiation Source Elimination 2 16,520 8,829 24,525 -9,683 1 Electromagnetic Radiation System 2 16,520 8,829 24,525 -9,683 1 Electric Division System 2 2,425 2,533 4,912 -2,458		0603268N	Naval Airship	N	6,743	24,467	62,376	-62,376	
Electromagnetic Radiation Source Elimination 2 7,252 5,565 12,884 -6,832		0603270N	EW Technology	7		11,563		12,197	12,197 U
Ship Propulation System 2 16,520 8,829 24,525 -9,683 14,842 Electric Drive 2 9,168 14,171 14,264 -223 14,041 Human Factors Engineering 2 2,425 2,533 4,912 -2,458 2,454 Human Factors Engineering 2 2,425 2,533 4,912 -2,458 2,454 Hadical Development 2 11,167 19,127 18,743 -135 18,608 Handpower and Presidual Systems 2 2,855 3,038 5,518 -1,542 3,976 Generic Logistics ReD Technology Demonstrations 2 4,759 5,665 8,722 -2,569 6,153 Harine Corps Advanced Hanpower/Training Systems 2 2,306 1,661 5,149 -4,304 19,865 Simulation and Training Devices 2 4,836 10,826 11,844 -303 11,541 ARIADNE 2 23,657 22,273 2,458 -21 2,437 Advanced Anti-Submarine Warfare Technology 2 23,657 25,273 2,458 -21 2,437 Advanced Technology Transition 2 14,362 29,7145 -93,721 204,074 Technology Development 2 23,649 233,356 29,7145 -93,721 204,074 Technology Development 2 23,649 233,356 29,7145 -93,721 204,074 Technology Development 2 23,649 233,356 29,7145 -93,721 204,074 Technology Development 2 24,64 24,64 24,64 24,64 Technology Development 2 24,64 24,64 24,64 24,64 Technology Development 2 24,64 24,64 24,64 24,64 Technology Development 2 24,64 24,74 24,74 24,74 Technology Development 2 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 Technology Development 2 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 24,74 2		NE0EE090	Electromagnetic Radiation Source Elimination Technology	8	7,252	5,585	12,884	-6,832	6,052 U
Human Factors Engineering 2 9,168 14,171 14,264 -223 14,041 14,041 14,264 -223 14,041 1		0603508N	Ship Propulsion System	N	16,520	8,829	24,525	-9,683	14,842 U
Human Factors Engineering 2	_	0603573N	Electric Drive	8	9,168	14,171	14,264	-223	14,041 U
Hedical Development	_	0603701N	Human Factors Engineering	8	2,425	2,533	4,912	-2,458	2,454 U
Hanpower and Personnel Systems 2 2,855 3,038 5,518 -1,542 3,976 Generic Logistics ReD Tachnology Demonstrations 2 17,120 26,815 24,169 -4,304 19,865 Education and Training 2 4,759 5,065 8,722 -2,569 6,153 Harine Corps Advanced Hanpower/Training Systems 2 2,306 1,861 5,149 -43 5,106 Simulation and Training Devices 2 8,325 8,276 9,532 -3,081 6,451 Navy Logistic Productivity 2 4,836 10,826 11,844 -30.3 11,544 Advanced Anti-Submarine Warfare Technology 2 23,657 22,273 2,458 -1.2 2,437 Advanced Technology Transition 2 46,976 58,473 -1,303 57,170 Technology Development 143,949 -23,356 297,745 -93,721 204,074	_	N901E090	Medical Development	81	11,167	19,127	18,743	-135	18,608 U
Generic Logistics ReD Technology Demonstrations 2 17,120 26,815 24,169 -4,304 19,865 Education and Training 9 4,759 5,065 8,722 -2,569 6,153 Harine Corps Advanced Manpower/Training Systems 2 2,306 1,861 5,149 -43 5,106 Simulation and Training Devices 2 8,325 8,276 9,532 -3,081 6,451 Navy Logistic Productivity 2 4,836 10,826 11,844 -12 1,464 ARIADNE 2 2,3,657 22,273 2,458 -21 2,437 Advanced Anti-Submarine Warfare Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 2 143,949 -23,3356 -99,745 -93,721 204,076	-	0603707N	Manpower and Personnel Systems	8	2,855	3,038	5,518	-1,542	3,976 U
Education and Training . 2 4,759 5,065 8,722 -2,569 6,153 Marine Corps Advanced Manpower/Training Systems 2 2,306 1,861 5,149 -43 5,106 Simulation and Training Devices 2 8,325 8,276 9,532 -3,081 6,451 Navy Logistic Productivity 2 4,836 10,826 11,844 -33 11,541 ARIADNE 2 23,657 22,273 2,458 -21 2,437 Advanced Anti-Submarine Warfare Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 143,949 233,356 297,745 -93,721 204,024	0	0603712N	Generic Logistics ReD Technology Demonstrations	8	17,120	26,815	24,169	-4,304	19,865 U
Harine Corps Advanced Manpower/Training Systems 2 2,306 1,861 5,149 -43 5,106 Simulation and Training Devices 2 8,325 8,276 9,532 -3,081 6,451 Navy Logistic Productivity 2 4,836 10,826 11,844 -303 11,541 ARIADNE 2 23,657 22,273 2,458 -21 2,437 Advanced Anti-Submarine Warfare Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 143,949 233,356 297,745 -93,721 204,024	•	0603720N	Education and Training .	8	4,759	5,065	8,722	-2,569	6,153 U
Simulation and Training Devices 2 8,325 8,276 9,532 -3,081 6,451 Navy Logistic Productivity 2 4,836 10,826 11,476 -12 1,464 ARIADNE 2 4,836 10,826 11,844 -303 11,541 Advanced Anti-Submarine Warfare Technology Transition 2 23,657 22,273 2,458 -21 2,437 Advanced Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 143,949 233,356 297,745 -93,721 204,024	0	0603732H		0	2,306	1,861	5,149	-43	
Navy Logistic Productivity 2 4,836 10,826 11,844 -12 1,464 ARIADNE 2 4,836 10,826 11,844 -303 11,541 Advanced Anti-Submarine Warfare Technology 2 23,657 22,273 2,458 -21 2,437 Advanced Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 143,949 233,356 297,745 -93,721 204,024	0	0603733N	Simulation and Training Devices	~	8,325	8,276	9,532	-3,081	6,451 U
ARIADNE Advanced Anti-Submarine Warfare Technology 2 23,657 22,273 2,458 -21 2,437 Advanced Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 143,949 233,356 297,745 -93,721 204,024	0	0603739N	Navy Logistic Productivity	8		196	1,476	-12	1.464 11
Advanced Anti-Submarine Warfare Technology 2 23,657 22,273 2,458 -21 2,437 Advanced Technology Transition 2 14,362 46,976 58,473 -1,303 57,170 Technology Development 243,949 233,356 297,745 -93,721 204,024	0	0603743N	ARIADNE	8	4,836	10,826	11,844	-303	
Advanced Technology Transition 2 14,362 46,976 58,473 -1,303 57,170	0	0603747N	Advanced Anti-Submarine Warfare Technology		23,657	22,273	2,458	-21	
143,949 233,356 297,745 -93,721	0	0603792N	Advanced Technology Transition	7	14,362	46,976	58,473	-1,303	57,170 U
		Advanced	Technology Development		143,949	233,356	297,745	-93.721	204.024

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			f				Thousands of	f Dollars
Line						PY 88/89	0001 20	1
2	Jagunn	Item Nomenclature	Act	PY 1987	FY 1988	FY 1989	ADJUSTMENT	FY 1989 C
37	N11EE090	ASW Technology for Strategic Defense	m			67,400	-67,400	
38	0603451N	Tactical Space Operations	m	12,068	1,992	5,859	-321	5.538 11
39	0603588N	SSBN Survivability.	m	927	006 '9	13,926	-4,194	
40	0603735N	WWMCCS Architecture Support	m			4,915	-41	
41	0604363N	TRIDENT II	e	1,573,323	1,050,463	581,740	-851	580,889 U
42	0605856N	Strategic Technical Support	m	2,334	3,431	3,508	-268	3,240 U
43	0101221N	Fleet Ballistic Missile System	m	18,392	27,898	54,470	-15,737	38,733 U
44	0101224N	SSBN Security Technology Program	m	52,239	38,833	42,476	-574	
45	0101228N	Trident	e	. 33,685	30,921	43,938	-10,455	
46	0101401N	Extremely Low Frequency (BLF) Communications	9	14,967	3,221	3,342	-28	
47	0101402N	Navy Strategic Communications	m	89,788	79,160	65,799	-12,861	
48	0102427N	Naval Space Surveillance	m	1,195	678	711	-	
6	0303131N	Minimum Essential Emergency Communications Network (MEECN)	m	1,637	1,026	1,054	-10	
20	0303152N	World-Wide Military Command and Control Systems, Information System	m	12,590	1,599	5,253	-625	4,628 U
	Strategic	c Programs		1,813,145	1,252,122	894,391	-113.380	110 182
21	N601E090	Integrated Aircraft Avionics	4	19,845	8,807	2,093	-26	2.067 11
25	0603206N	Electronic Warfare Advanced Development	4	19,337		46,821	-46.821	
53	0603207N	Air/Ocean Tactical Applications	4	6,473	11,254	15,909	-8.134	7,776 1,
54	0603208N	T-45 Training System	4	134,163	94,579	87,822		87.822 11

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AMENDED e 964 U 8,333 U 1,190 U 8,960 U Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT -350 -2,856 1,190 -757 -4,211 PRES BUDGET FY 1989 8,683 2,856 5,175 9,717 3,545 9,004 FY 1988 8,167 3,623 3,059 FY 1987 5,308 Act Advanced Multimission Sensor System Aviation Life Support Systems (Adv) Item Nomenclature Skipper Enhancements CV ASW Module Air ASW V-22A

55 0603216N

0603220N 0603222N 0603228N 0603254N 0603256N 0603257N 0603260N 0603261N 0603262N N90EE090 0603318N N618E090 0603320N 0603321N 0603382N 0603502N 0603504N N903E090

Program Line Element No Number 12,148 U

-174

-17,909

17,909

78,097 12,322 8,631 18,569 26,724

8,783

10,680

310,131

9,641 9,641 31,888 63,612 5,872

22,094

8,278 U 11,619 U 22,581 U

-4,143

-1,469

102,183

33,745

Aircraft Survivability and Vulnerability Advanced A/L Air-to-Surface Missile System

Advanced Surface-to-Air Missile

NATO AAW Systems

Tactical Airborne Reconnaissance

Airborne Mine Countermeasurers

62

A-6 Upgrades

60

-6,950

00,714 U 8,068 U

-148

8,216

14,057 16,637 7,829 15,012 8,121

37,946

Advanced Air-to-Air Missile (AAAM)

Battle Group AAW Coordination Surface Mine Countermeasures

Low Cost Anti-Radiation Seeker

Advanced Submarine ASW Development

Surface Ship Torpedo Defense

6,663

8,761 U 30,374 U

-57,218

11,665 11,876 11,876 14,775

8,592 U 11,687 U 12,390 U

-189

-2,385

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24,198

16,768

17,591

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35,211 U

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18 19 90 82

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7,997 U 10,921 0 28,301 U 3,373 U 59,851 U 15,714 U 11,249 U 37,722 U 3,239 U 72,750 U 6,235 U 13,640 U 10,886 U 85,000 U AMENDED FY 1989 Thousands of Dollars FY 1989 ADJUSTMENT -3,812 -4,017 -7,997 -101 -5,104 -280 009--102-5,881 41,650, -2,617 -3,175 -380-10,388 FY 88/89 PRES BUDGET FY 1989 4,017 11,809 16,802 36,298 3,474 20,818 11,529 38,322 59,851 3,341 31,100 9,410 11,266 24,028 87,617 FY 1988 24,672 4,894 1,965 9,805 9,590 12,593 26,191 2,863 80,680 74,459 46,240 5,872 3,915 123,211 FY 1987 2,512 71,841 11,763 10,342 25,253 23,523 1,243 2,000 11,076 19,979 5,597 350 19,068 10,953 93,175 Act Submarine Arctic Warfare Support Equipment Program Advanced Nuclear Reactor Components and Systems Development Non-Acoustic Anti-Submarine Warfare (ASW) Shipboard System Component Development Submarine Hull Array Development (Adv) Shipboard Information Transfer System Submarine Tactical Warfare Systems Surface Ship Navigation System Attack Submarine Development Item Nomenclature Ship Combat Survivability Radiological Control Advanced ASW Target Ship Development RETRACT JUNIPER RETRACT LARCH LINK DOGWOOD Surface ASW PILOT FISH Catapults Program Line Element No Number N603E090 0603512N 0603513N 0603514N 0603522N 0603525N 0603527N 0603528N 0603529N N9ESE090 0603542N N022E090 NESSE090 0603560N 0603562N 0603564N 0603565N N693E090 0603570N

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Number N			i				Thousands of Dollars	Dollars
Number Item Nomenclature Act FF 1987 FF 1988 0603571N Physical Security 4 4,123 8,513 0603576N CHALK EAGLE 4 4,123 8,513 0603576N Shipboard Laser Weapon 4 75,628 89,451 0603578N Shipboard Laser Weapon 4 13,942 9,796 060357N Shipboard Laser Weapon 4 13,942 9,796 060350N Combat Systems Integration 4 13,942 9,796 060360N Conventional Wunitions 4 13,942 9,796 060360N Conventional Wunitions 4 27,147 20,462 060361N Advanced Warhead Development 4 14,214 11,945 060361N Advanced Warhead Development 4 14,214 11,945 060361N Advanced Warhead Development 4 14,214 11,945 0603654N Tactical Nuclear Explosive Orderance Development 4 13,943 11,471 0603654N Tactica	Lir					FY 88/89	0000	0
0603571N Physical Security 4 4,123 6,513 9 6513 8 6 6 9 7 8 8 7 9 9 9 9 9 9 9 9 9 9 9 <th>ž</th> <th>Item Nomenclature</th> <th>Act</th> <th>FY 1987</th> <th>FY 1988</th> <th>FY 1989</th> <th>ADJUSTHENT</th> <th>FY 1989 C</th>	ž	Item Nomenclature	Act	FY 1987	FY 1988	FY 1989	ADJUSTHENT	FY 1989 C
060357N CHAIK EAGLE 4 75,628 89,451 9 060357N Shipboard Laser Weapon 4 3,308 89,451 9,796 060357N A4W/ALG Nuclear Propulsion Plant 4 13,942 9,796 12 060358N Combat System Integration 4 13,942 9,796 24,550 23 060350N Combat System Integration 4 13,942 9,796 23 060360N Whire Development 4 13,466 23,466 23 060360N Chark Pine Corpanitional Hunitions 4 27,147 20,462 3 060360N Chark Pine Advanced Warhead Development 4 14,214 11,945 1 060360N Advanced Warhead Development 4 14,214 1,601 1 060363N Advanced Warhead Development 4 14,214 1,401 1 060363N Artine Corps Assault Vehicles Assuer 4 1,401 1 1,401 1 0603	6	Physical Security	4	4,123	8,513	6.479	-134	6,345 U
060357N Shipboard Laser Weapon 4 3,308 060357BN A4W/ALG Nuclear Propulsion Plant 4 3,308 060359LN Combat System Integration 4 128,499 224,550 23 060350LN Wine Development 4 6,988 23,486 2 060360LN Wine Development 4 6,988 23,486 3 060361N Wine Development 4 27,147 20,462 3 060361N Advanced Warhead Development 4 27,147 20,462 1 060361N Advanced Warhead Development 4 14,214 11,945 1 060361N Advanced Warhead Development 4 14,214 11,945 1 060363N Tactical Nuclear Development 4 16,866 1,601 1 060363N Tactical Nuclear Development 4 13,943 11,307 1 0603702N Ocean Engineering Systems Development 4 10,419 8,586 1 0603702N A	6	CHALK EAGLE	•	75,628	89,451	99,631		U 169, 69
0603598N A4W/AIG Nuclear Propulsion Plant 4 3,308 0603582N Combat System Integration 4 13,942 9,796 0603591N Joint Advanced Systems 4 126,499 224,550 060360N Wine Development 4 6,986 23,486 060360N CONVentional Hunitions 4 27,147 20,462 060361N Advanced Warhead Development 4 27,147 20,462 060361N Advanced Warhead Development 4 14,214 11,945 060361N Marine Corps Assault Vehicles 4 6,631 2,058 060363N Tactical Nuclear Development 4 14,214 1,601 060365AN Tactical Nuclear Development 4 13,843 11,307 0603702N Ocean Engineering Systems Development 4 10,419 8,588 0603702N ASW Signal Processing 4 10,419 8,588 0603703N Advanced Marine Bloogloal System 4 10,419 8,580 0603703N	9	Shipboard Laser Weapon	4			2,874	-2,874	n
0603582N Combat System Integration 4 13,942 9,796 0603591N Joint Advanced Systems 4 128,499 224,550 0603601N Mine Development 4 6,988 23,486 0603602N CHALK PINE 4 5,945 20,462 0603603N Conventional Hunitions 4 27,147 20,462 060361N Advanced Warhead Development 4 14,214 11,945 060363N Tactical Nuclear Development 4 16,866 1,601 060363SAN Tactical Nuclear Development 4 16,866 1,601 0603702N Ocean Engineering Systems Development 4 10,419 8,588 0603702N ASW Signal Processing 4 10,419 8,588 0603708N Advanced Marine Bloiogical System 4 10,419 8,588 0603708N Advanced Marine Bloiogical System 4 5,145 5,491 060371NN Pleet Tactical Development and Evaluation Program 4 4,289 4,697	96	A4W/AlG Nuclear Propulsion Plant	4	3,308				D
0603501N Joint Advanced Systems 4 126,499 224,550 0603601N Wine Development 4 6,988 23,486 0603602N CHALK PINE 4 5,988 23,486 0603602N Conventional Munitions 4 27,147 20,462 060361N Advanced Warhead Development 4 14,214 11,945 060363N Tactical Nuclear Development 4 6,631 2,058 060363N Tactical Nuclear Development 4 16,866 1,601 060363N Joint Service Explosive Ordnance Development 4 13,843 11,307 0603702N Ocean Engineering Systems Development 4 10,419 8,588 0603702N ASW Oceanography 4 10,419 8,588 0603708N Advanced Marine Biological System 4 5,145 5,491 060371NN Fleet Factical Development and Evaluation Program 4,289 4,697	16	Combat System Integration	4	13,942	961'6	10,467	-147	10,320 U
0603601N Wine Development 4 6,988 23,486 2 0603602N CHALK PINE 4 27,147 20,462 3 0603603N Conventional Hunitions 4 27,147 20,462 3 060361N Advanced Warhead Development 4 14,214 11,945 1 0603634N Tactical Nuclear Development 4 16,866 1,601 1 0603634N Tactical Nuclear Development 4 16,866 1,601 1 0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603704N ASW Oceanography 4 10,419 8,588 1 0603704N ASW Signal Processing 4 10,419 8,586 1 0603708N Advanced Marine Biological System 4 15,952 18,001 1 0603709N Ribert Tactical Development and Evaluation Program 4 4,289 4,697	96	Joint Advanced Systems	4	128,499	224,550	236,620		236,620 U
0603602N CHALK PINE 4 27,147 20,462 3 0603609N Conventional Munitions 4 27,147 20,462 3 0603610N Advanced Warhead Development 4 14,214 11,945 1 0603634N Tactical Nuclear Development 4 6,631 2,058 1 0603634N Tactical Nuclear Development 4 16,866 1,601 1 0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Enginearing Systems Development 4 10,419 8,588 1 0603704N ASW Oceanography 4 10,419 8,588 1 0603709N Advanced Marine Biological System 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4,289 4,697	66	Wine Development	4	886'9	23,486	29,523	-8,491	21,032 U
0603609N Conventional Munitions 4 27,147 20,462 3 0603610N Advanced Warhead Development 4 14,214 11,945 1 0603611M Marine Corps Assault Vehicles 4 6,631 2,058 1 0603634N Tactical Nuclear Development 4 16,866 1,601 0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 1,374 1,471 1 0603704N ASW Oceanography 4 16,419 8,588 1 0603708N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 1	100	CHALK PINE	4					,
0603610N Advanced Warhead Development 4 14,214 11,945 1 0603611H Marine Corps Assault Vehicles 4 14,214 11,945 1 0603634N Tactical Nuclear Development 4 6,631 2,058 1 060365AN Tactical Nuclear Development 4 16,866 1,601 1 0603702N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 10,419 8,588 1 0603704N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4,289 4,697	101	Conventional Munitions	å	27,147	20,462	36,902	-15,285	21,617 U
0603611M Marine Corps Assault Vehicles 4 14,214 11,945 1 0603634N Tactical Nuclear Development 4 6,631 2,058 1 0603654N Marine Corps Ground Combat/Support System 4 16,866 1,601 1 0603702N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 1,374 1,471 1 0603704N ASW Oceanography 4 10,419 8,586 1 0603709N Advanced Marine Biological System 4 15,952 18,001 1 0603709N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	102	Advanced Warhead Development	4			7,686	-7,686	מ
0603634N Tactical Nuclear Development 4 6,631 2,058 1 06036354N Marine Corps Ground Combat/Support System 4 16,866 1,601 0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 1,374 1,471 1 0603704N ASW Oceanography 4 10,419 8,588 1 0603709N Advanced Marine Biological System 4 15,952 18,001 1 0603709N Fleet Tactical Development and Evaluation Program 4 4,697 4,697	103	Marine Corps Assault Vehicles	4	14,214	11,945	13,497	-166	13,331 U
0603635M Harine Corps Ground Combat/Support System 4 16,866 1,601 0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 1,374 1,471 1 0603704N ASW Oceanography 4 10,419 8,588 1 0603709N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4 4,697	104	Tactical Nuclear Development	₹*	6,631	2,058	19,375	-8,970	10,405 U
0603654N Joint Service Explosive Ordnance Development 4 13,843 11,307 1 0603702N Ocean Engineering Systems Development 4 1,374 1,471 0603704N ASW Oceanography 4 10,419 8,588 1 0603708N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	105	Marine Corps Ground Combat/Support System	4	16,866	1,601	9,410	-2,752	6,658 U
0603702N Ocean Engineering Systems Development 4 1,374 1,471 0603704N ASW Oceanography 4 10,419 8,588 1 0603709N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	106	Joint Service Explosive Ordnance Development	•	13,843	11,307	12,412	-579	11,833 U
0603704N ASW Oceanography 4 10,419 8,588 1 0603708N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	101	Ocean Engineering Systems Development	4	1,374	1,471	1,901	-49	1,852 U
0603708N ASW Signal Processing 4 15,952 18,001 1 0603709N Advanced Marine Biological System 4 5,145 5,491 0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	108	ASW Oceanography	4	10,419	8,588	10,120	-848	9,272 U
0603709N Advanced Marine Biological System 0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	109	ASW Signal Processing	4	15,952	18,001	13,851	-315	13,536 U
0603711N Fleet Tactical Development and Evaluation Program 4 4,289 4,697	110	Advanced Marine Biological System	4	5,145	5,491	6,286	-467	5,819 U
	111	Fleet Tactical Development and Evaluation Program	4	4,289	4,697	6,127	-51	6,076 U

Department of the Navy FY 1989 R D T & E Program

Exhibit R-1 Date: February 1988

Appropriation: 1319 N Research Development Test & Eval Navy

			1				Thousands of	Dollars
Line	Program ne Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
112	2 0603713N	Ocean Engineering Technology Developments	4	12,634	13.135	801.31		. 336 46
113	N 0603717N	Command and Control Systems	4	31,601			27.504	27 504 11
114	N612E090	Container Off-Loading and Transfer System (COTS)	4	2,783	1,495			
115	6 0603722N	Naval Special Warfare	4	19,498		20,706	-20,706	· >
911	0603724N	Navy Energy Program	4	15,953	7,556	8,839	-266	8,573 U
117	·0603725N	Facilities Improvement	4	8,152	9,744	4,185	-148	4,037 U
118	0603726N	Merchant Ship Naval Augmentation Program	•			3,530	-3,530	Þ
119	0603729М	Marine Corps Combat Services Support	4	15,402	9,640	24,418	-8,932	15,486 U
120	0603734N	CHALK CORAL	4	10,681	4,546	4,524		4,524 U
121	0603737N	LINK HAZEL	4	17,043	4,000	6,800		008'9
122	0603740N	LINK LAUREL	4	40,122	53,843	59,672		59,672 U
123	0603741N	Satellite Laser Communications	4	17,470			5,269	
124	0603744N	LINK SPRUCE	4	67,743	281,855	311,707	-311,707	ם
125	0603746N	RETRACT MADLE	4	48,465	72,028	50,897	30,800	81,697 U
126	0603748N	LINK PLUMERIA	4		7,000	11,529	-500	U, 029, II
127	0603750N	CHALK WEED	4		1,324	10,014	006'8-	1,114 U
128	0603751N	RETRACT ELM	4		39,041	41,039		41.039 1
129	0603752N	CHALK POINSETTIA	4					
130	NE97E090	Warfare Systems Architecture and Engineering	4	5,829			11,225	11,225 U

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Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

			į				Thousands of Dollars	Dollars
Line El No Nu	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 Adjustment	S AMENDED e FY 1989 C
131 06	0603764N	LINK EVERGREEN	4					
132 06	0603784N	Fixed Distributed System	*	27,250	64,588	112,039	-7,149	104.890
	0603785N	Anti-Submarine Warfare Environmental Acoustic Support	4	10,178	16,143	13,920	-195	13,725 U
	0603787N	Special Processes	4	41,485	40,423	38,173		38,173 U
135 06	0604203N	Standard Avionics Development	4	9,944	7,230	17,445	-5,323	12,122 U
	0604211N	IFF System Development	4	20,820	20,033	33,866	-8,632	25,234 U
137 06	0604212N	LAMPS	4	18,587	18,359	6,171	-115	n 950'9
138 06	0604213N	Helicopter Development		8,900	13,080	12,595	-594	12,001 U
	0604214N	AV~8B Aircraft (Engineering)	4	41,812	36,655	11,404	27,752	39,156 U
140 06(0604215N	Support Equipment	4	26,135	009'09	64,307	4,672	N 66,939
141 060	0604217N	S-3 Weapon System Improvement	4	13,747				
142, 060	0604219N	Airborne ASW Developments	49	1,228				, =
143 060	0604221N	P-3 Modernization Program	4	53,082	97,788	152,145	52,675	204.820 II
144 060	0604224N	Airborne Electronic Warfare - Eng	4	31,713		37,384	-37,384	
145 060	0604226N	Airborne Self-Protective Jammer	4	9,692		6,324	-6.324	• =
146 060	0604229N	Carrier Inner Zone ASW Helicopter	*	6,175				
147 060	0604233N	Advanced Tactical Aircraft (ATA)	4					.
148 060	0604252N	Aircraft Propulsion	4	27,500		1,999	-1,999	
149 060	0604255N	Electronic Warfare Simulator Development	4	38.215	33.846	107 67	,	

Date: February 1988

Exhibit R-1

Department of the Navy FY 1989 R D T & E Program

Appropriation: 1319 N Research Development Test & Eval Navy

			i				THOUSANDS OF DOLLARS	DOLLARS
Line	Program 1e Element Number	Item Nomenclature	Act	FY 1987	PY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
150	0604260N	C/WH-53E	. •	3,627	9,593	9,228	-277	8.951
151	0604261N	Acoustic Search Sensors	4	27,214	39,037	55,385	-12.229	43.156.11
152	0604262N	V-22A	4	421,421	465,662	306,677		11 229 908
153	0604264N	Aviation Life Support Systems (Eng)	4	20,712	19,340	18,905	-1,743	17.162
154	0604268N	Aircraft Engine Component Improvement Program	4	36,153	35,086	37,267	-1,164	36,103 U
155	0604270N	EW Development	4		182,887		189,814	189,814 U
156	0604301N	MK 92 Fire Control System Upgrade	4	3,705	3,441	2,974	-28	2,946
157	0604303N	AEGIS Area Air Defense	4	3,278	7,226	9,267	-113	9,154 U
158	0604307N	AEGIS Combat System Engineering	4	113,206	104,150	46.162	13.304	50.466.11
159	0604308N	LINK ASH	4	8,582				
160	0604309N	SEA LANCE	4	105,565	105,038	113.518	-63.518	
161	0604314N	Advanced Hedium Range Air-to-Air Missile	4	4,892	24,467	13.960	-360	000100
162	0604353N	Vertical Launching System	4	12,639				
163	0604354N	Air-to-Air Hissile Systems Engineering	4	23,326	19,573	23.954	-2.648	20 206 16
164	0604355N	Vertical Launch ASROC	4	39,232	40,397	5,670	24.617	30.287 11
165	0604358N	Close-In Weapon System (PHALANX)	4	6,282	5,055	11,416	060.9-	F. 326 II
991	0604361N	NATO SEA SPARROW	4	1,829	2,936	6,020	-50	11 070.2
167	0604366N	Standard Missile Improvements	4	43,566	29,359	45,007	7.052	52.050 11
168	0604367N	ТОМАНАЧК	4	60,540	45,000	46,699	-1.149	45, 550 11

UNCLASSIFIED

Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

			-				Thousands of	of Dollars
Line	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED e FY 1989 C
169	0604369N	S"Rolling Air Frame Missile	•	22,789	12,622	10,047	-1,444	8,603 U
170	0604370N	SSN-688 Class Vertical Launch System	4	15,404	17,886	14,388	-230	
171	0604372N	New Threat Upgrade	4	39,668	19,573	13,196	-220	
172	0604502N	Submarine Communications	4	3,610	3,276	4,476	-336	4,140 U
173	0604503N	Submarine Sonar Development	4	48,702	33,564	37,084	-1,051	36,033 U
174	0604504N	Air Control	4	10,272	13,702	19,663	-1,635	18,028 U
175	0604506N	Chemical Warfare Countermeasures	4	4,920	8,414	8,702	-2,194	U 808.9
176	0604507N	Navy Standard Signal Processors	4	95,809	64,753	29,367	-350	29,017 U
177	0604508N	Radar Surveillance Equipment	•	7,293	6,851	10,702	-4,578	
178	0604511N	Intelligence Systems	4		978	21,916	-21,916	
179	0604515N	Submarine Support Equipment Program	4	17,302	14,680	15,728	-272	15,456 U
180	0604516N	Ship Survivability	4	6,423	7,607	6,445	-365	n 080'9
181	0604518N	Combat Information Center Conversion	4	30,709	186'6	30,822	-11,213	n 609'61
182 (0604524N	Submarine Combat System	4	288,768	317,849	392,584	-10,050	
183 (0604561N	SSN-21 Developments	4	240,523	210,000	195,080		
184 (0604562N	Submarine Tactical Warfare System	4	40,501	42,013	45,165	-1,248	43,917 U
185 (0604563N	Physical Security (Engineering)	4	6,338	10,818	12,486	-400	
981	0604567N	Ship Subsystem Development/Land Based Test Site	4	75,219	48,888	74,089	-15,422	
187 0	0604573N	Shipboard Electronic Warfare Improvements	•	40 077				

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Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

Richard Rich			TOTAL WESTERN TOTAL TOTAL TEST & BYAL MAVY					Date: Feb	Date: February 1988
Part Page Part				į					
0604574M Exandard Embedded Computer Resources 4 18,757 19,635 35,412 -22,219 13,193 0604573M AM/808-33C AM/808-33C 4 23,927 11,114 8,416 -5,450 2,959 0604673M Link Birch 4 5,810 3,000 1,922 1,922 0604603M Mine Development 4 10,270 10,232 10,337 -5,46 1,922 0604603M Mine I Cunnery Improvements 4 10,270 10,232 10,337 -5,46 1,922 0604603M Mine I Cunnery Improvements 4 1,445 1,690 6,367 -4,346 2,015 0604604M Chemical Warson 4 15,241 15,244 5,860 -4,346 2,015 06046504M Mine Extra-Optic System 4 17,294 14,046 -3,246 1,550 0604654M Mine Extra-Optic System 4 17,294 14,046 -3,346 1,550 0604654M Mine Extra-Optic System 4	No		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
0604578N AM/808-53C 4 23,927 11,114 6,416 -5,450 2,928 0604578N Link Birch 4 5,810 3,000 1,922 1,922 0604601N Wine Development 4 10,270 10,232 10,937 -548 10,389 0604602N Naval Cunnery Improvements 4 10,270 10,232 10,937 -548 10,389 0604603N Unquided Conventional Air-Launched Weapons 4 1,445 1,690 6,367 -4,348 2,018 0604603N Unquided Conventional Air-Launched Weapons 4 15,241 1,590 6,367 -4,348 2,018 0604603N Surface Riccirci-Optic System 4 15,241 15,244 5,660 -6,147 7,38 0604608N Surface Riccirci-Optic System 4 15,241 15,244 5,660 -6,147 7,38 0604608N Surface Riccirci-Optic System 4 172,994 140,600 12,622 122,063 1,34 0604656N	88		Standard Embedded Computer Resources	4	18,757	19,635	35,412	-22,219	13.193 U
0604578N Link Birch 4 5,810 3,000 1,922 1,932 0604601N Mine Development 4 10,270 10,332 10,937 -548 10,399 0604602N Maval Gunnery Improvements 4 1,445 1,690 6,367 -6,147 7,869 0604603N Unguided Conventional Air-Launched Weapons 4 1,445 1,690 6,367 -4,348 2,019 0604608N Surface Electro-Optic System 4 15,241 1,690 6,367 -4,348 2,019 0604608N Surface Electro-Optic System 4 15,241 1,690 6,367 -4,348 2,019 0604609N Surface Electro-Optic System 4 172,994 140,600 12,622 12,063 13,665 0604610N Mx So Torpedo 4 172,994 140,600 12,622 122,063 13,458 0604656N Marline Corps Assault Vehicles 4 5,081 5,316 -4,939 -4,939 060465N Mx 49 ADGAP (Engineering	68		AN/808-53C	4	23,927	11,114	8,418	-5,450	
0604601M Mine Devolopment 4 10,270 10,932 10,937 -548 10,938 0604602M Maxal Gunnery Improvements 4 9,208 9,970 14,016 -6,147 7,869 0604603M Unguided Conventional Air-Launched Weapons 4 1,445 1,690 6,367 -4,348 2,019 0604603M Schedelow Schedelow 4 15,241 15,244 5,860 -4,348 2,019 0604603M Schedelow Schedelow 4 15,241 15,244 -3,554 1,590 0604650M MK 50 Torpedo 4 17,994 140,600 12,622 122,063 13,468 0604655M MK 50 Torpedo 3,611 4,046 12,622 122,063 13,468 0604656M Marine Corps Assault Vahicles 4 5,081 5,316 4,58 5,334 0604656M Marine Corps Assault Vahicles 4 5,081 5,316 4,939 -4,939 0,025 0604656M Marine Corps Ground Combat	06		Link Birch	4	5,810	3,000	1,922		1,922 U
6064602N Naval Gunnery Improvements 4 9,208 9,970 14,016 -6,147 7,689 6064603N Unguided Conventional Air-Launched Weapons 4 1,445 1,690 6,367 -4,348 2,019 6064608N Surface Electro-Optic System 4 15,241 15,244 5,860 -86 5,774 6064608N Surface Electro-Optic System 4 15,241 15,244 5,860 -86 5,774 606460N Bomb Fuze Improvement 4 172,994 140,600 12,622 12,053 14,668 6064654N Joint Service Explosive Ordnance Development 4 172,994 140,600 12,622 12,063 1,593 6064654N Joint Service Explosive Ordnance Development 4 5,081 5,316 4,798 20,025 6064654N Harine Corps Assault Vahiclas 4 5,984 4,799 -4,339 20,025 606465N Harine Corps Assault Vahiclas 4 5,656 21,700 30,300 -2,618 606465N<	16		Mine Development	4	10,270	10,232	10,937	-548	10,389 U
0604603N Chemical Warfare Waapons 4 1,445 1,646 6,367 -4,348 2,019 0604604N Chemical Warfare Waapons 4 3,670 -8,680 -8,680 -8,774 0604608N Surface Electro-Optic System 4 15,241 15,244 -8,680 -86 5,774 0604608N Surface Electro-Optic System 4 172,994 14,844 -3,254 1,550 0604609N Bomb Fuze Improvement 4 172,994 14,844 -3,254 1,550 060465AN Wis Surpressor Corps 30,112 5,316 5,379 -4,59 1,59 060465AN Warline Corps Assault Vehicles 4 2,924 4,939 -4,939 -4,939 060465AN Marline Corps Assault Vehicles 4 2,924 1,122 1,245 2,618 060470AN Mit 48 ADCAP (Engineering) 4 1,127 1,122 1,248 -4,939 060470AN Anti-Submarine Warfare Oceanographic Equipment 4 1,122 1,246 -7,86	95		Naval Gunnery Improvements	4	9,208	9,970	14,016	-6,147	7,869 U
060460BN Chemical Warfare Weapons 4 3,670 060460BN Surface Electro-Optic System 4 15,241 15,244 5,860 -86 5,774 060460BN Surface Electro-Optic System 4 15,241 15,241 1,590	60		Unguided Conventional Air-Launched Weapons	4	1,445	1,690	6,367	-4,348	2,019 U
0604608N Surface Electro-Optic System 4 15,241 15,244 5,860 -86 5,774 0604609N Bomb Fuze Improvement 4 6,083 8,380 4,844 -3,254 1,590 0604610N HK SO Torpedo 12,622 12,063 122,063 134,685 060465AN Joint Service Explosive Ordnance Development 4 5,081 5,316 5,379 -45 5,334 060465AN Harine Corps Assault Vehicles 4 2,924 4,939 -4,939 20,025 060465AN Harine Corps Ground Combat/Supporting Arms Systems 4 2,924 4,939 -4,939 -2,618 27,682 060470AN Mrit-Submarine Warfare Oceanographic Equipment 4 1,127 1,122 1,245 -10 1,235 0604705N Theatre Mission Planning Center 4 13,000 7,861 -7,861 17,395 0604706N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604700N Navy Energy Program	94		Chemical Warfare Weapons	4	3,670				5
0604609N Bomb Fuze Improvement 4 6,083 8,380 4,844 -3,254 1,590 0604610N MK 50 Torpedo 12,622 122,063 134,685 0604654N Joint Service Explosive Ordnance Development 4 5,081 5,316 5,379 -45 5,334 0604654N Marine Corps Assault Vehicles 4 2,924 4,939 -4,939 20,025 0604657N MK 48 ADCAP (Engineering) 4 55,656 21,700 30,300 -2,618 27,682 0604705N MK 48 ADCAP (Engineering) 4 1,127 1,122 1,245 -10 1,235 0604705N Anti-Submarine Warfare Oceanographic Equipment 4 13,000 7,861 -7,861 1,235 0604705N Theatre Mission Planning Center 4 19,685 28,235 16,778 -1,245 -7,861 0604707N Initial Trainer Acquisition 4 62,311 4,929 -13,758 56,749 0604710N Navy Energy Program 4 8,052 <t< td=""><td>5</td><td></td><td>Surface Electro-Optic System</td><td>4</td><td>15,241</td><td>15,244</td><td>5,860</td><td>98-</td><td>5,774 U</td></t<>	5		Surface Electro-Optic System	4	15,241	15,244	5,860	98-	5,774 U
0604610N HK 50 Torpedo 12,622 122,063 134,685 0604654N Joint Service Explosive Ordnance Development 4 5,081 5,316 5,379 -45 5,334 0604655N Harine Corps Asseult Vehicles 4 2,924 4,939 -4,939 20,025 0604675N HK 48 ADCAP (Engineering) 4 55,656 21,700 30,300 -2,618 27,682 0604705N Anti-Submarine Warfare Oceanographic Equipment 4 1,127 1,122 1,245 -10 1,235 0604705N Theatre Mission Planning Center 4 13,000 7,861 -7,861 17,395 0604707N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 -168 4,761	9	0604609N	Bomb Fuze Improvement	4	6,083	8,380	4,844	-3,254	1,590 u
0604654N Joint Service Explosive Ordnance Development 4 5,081 5,316 5,339 -45 5,334 0604656N Marine Corps Assault Vehicles 4 2,924 2,924 4,939 -4,939 20,025 0604657N Marine Corps Ground Combat/Supporting Arms Systems 4 2,924 4,939 -4,939 27,682 0604705N MK 48 ADCAP (Engineering) 4 1,127 1,122 1,245 -10 1,235 0604706N Anti-Submarine Warfare Oceanographic Equipment 4 13,000 7,861 -7,861 1,235 0604705N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 62,311 4,929 -13,758 56,749	1	0604610N	MK 50 Torpedo	4	172,994	140,600	12,622	122,063	134,685 U
0604656M Harine Corps Assault Vehicles 4 2,924 2,924 4,939 -4,939 20,025 060467N Harine Corps Ground Combat/Supporting Arms Systems 4 2,924 4,939 -4,939 -2,618 27,682 0604675N HK 48 ADCAP (Engineering) 4 55,656 21,700 30,300 -2,618 27,682 0604704N Anti-Submarine Warfare Oceanographic Equipment 4 1,127 1,122 1,245 -10 1,235 0604705N CHALK BANYAN 4 13,000 13,000 7,861 -7,861 17,395 0604708N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604708N Navy Energy Program 4 8,052 4,305 4,305 -13,768 4,761	8	0604654N	Joint Service Explosive Ordnance Development	4	5,081	5,316	5,379	-45	5,334 U
0604657M Marine Corps Ground Combat/Supporting Arms Systems 4 2,924 4,939 -4,939 -4,939 0604675N MK 48 ADCAP (Engineering) 4 55,656 21,700 30,300 -2,618 27,682 0604704N Anti-Submarine Warfare Oceanographic Equipment 4 1,127 1,124 1,245 -10 1,235 0604705N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604707N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	6	0604656M	Marine Corps Assault Vehicles	•		20,555	15,267	4,758	20,025 U
0604675N HK 48 ADCAP (Engineering) 4 55,656 21,700 30,300 -2,618 27,682 0604704N Anti-Submarine Warfare Oceanographic Equipment 4 1,127 1,122 1,245 -10 1,235 0604705N CHALK BANYAN 4 13,000 7,861 -7,861 17,395 0604707N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -16 4,761	9	0604657M	Marine Corps Ground Combat/Supporting Arms Systems	4	2,924		4,939	-4,939	Ð
0604704N Anti-Submarine Warfare Oceanographic Equipment 4 1,127 1,124 1,245 -10 1,235 0604705N CHALK BANYAN 4 13,000 7,861 -7,861 0604707N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	=	0604675N	MK 48 ADCAP (Engineering)	4	55,656	21,700	30,300	-2,618	27,682 U
0604705N CHALK BANYAN 4 13,000 13,000 7,861 -7,861 0604707N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	2	0604704N	Anti-Submarine Warfare Oceanographic Equipment	⋖*	1,127	1,122	1,245	-10	1,235 U
0604707N Theatre Mission Planning Center 4 19,685 28,235 16,778 617 17,395 0604700N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	33	0604705N	CHALK BANYAN	4	13,000	13,000	7,861	-7,861	· 5
0604708N Initial Trainer Acquisition 4 62,311 70,507 -13,758 56,749 0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	*	0604707N	Theatre Mission Planning Center	4	19,685	28,235	16,778	617	17,395 U
0604710N Navy Energy Program 4 8,052 4,305 4,929 -168 4,761	2	0604708N	Initial Trainer Acquisition	4	62,311		70,507	-13,758	56,749 U
	9	0604710N	Navy Energy Program	4	8,052	4,305	4,929	-168	4,761 U

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Department of the Navy FY 1989 R D T & B Program

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				٠			Thousands of Dollars	Dollars
Line	Program ne Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED 6 FY 1989 C
207	7 0604711N	Navy Command and Control Systems (NCCS) Ashore	4	42,140				5
208	3 0604713N	Surface ASW System Improvement	4		•	48,674	-48,674	D
209	0604714N	Air Warfare Training Devices	4			1,919	-1,919	n
210	0604715N	Surface Warfare Training Devices	4	22,392	16,829	22,441	-3,688	18,753 U
211	1 0604717H	Marine Corps Combat Services Support	*	4,705	22,859	22,599	-209	22,390 U
212	. 0604718Н	Marine Corps Intelligence/Electronics Warfare Sustam	4	2,119	11,064	1,093	-36	1,057 U
213	1 0604719	Marine Corps Command/Control/Communications	4	1,997	10,060	20,645	5,724	26,369 U
214	0604721N	Battle Group Passive Horizon Extension System Trainer	4			13,171	-13,171	Þ
215	0604725N	Regional Tactical Surveillance	4	34,895				Þ
216	0604761N	Intelligence	4	7,255	3,868	4,842	-172	4,670 U
217	0604763N	LINK CYPRESS	4					
218	0604771N	Medical Developments	4	2,423	3,469	3,075	67-	3,026 U
219	0604779N	Joint Interoperability of Tactical Command &	4	3,433			265	265 U
220	0604780M	JINTACCS Marine Corps	4	2,555	1,864	1,878	-131	1,747 U
221	0605803N	Electromagnetic Spectrum Management	•	3,727	1,958	6,465	-4,420	2,045 U
222	0605853N	Management and Technical Support	4	10,741	6,581	14,157	-4,800	9,357 U
223	NL985090	C2 Surveillance/Reconnaissance Support	4	9,077	6,414	7,867	99-	7,801 U
224	0204134N	A-6 Squadrons	•	11,684	451	8,500	-7,051	1,449 U
225	0204136N	F/A-18 Squadrons	•	30,045	11,929	19,897	-6,737	13,160 U

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Date: February 1988

			İ				Thousands of Dollars	f Dollars
Line	Program Blement					FY 88/89		S
S _O	Number	Item Nomenclature	Act	FY 1987	FY 1988	PRES BUDGET FY 1989	ADJUSTMENT	FY 1989 C
226	0204152N	Early Warning Aircraft Squadrons	4	32,763	21,137	24,852	-1,748	.23,104 U
227	0204161N	Aviation Support CVW	4	370	1,761	666'6	666,6-	
228	0204163N	Fleet Telecommunications (Tactical)	4	25,194	5,872	1,405	1,128	2,533 U
229	0204311N	Undersea Surveillance Systems	*	35,049	29,924	43,412	-2,474	40,938 U
230	0204313N	Ship-Towed Array Surveillance Systems	4	5,552	6,093	4,447	-37	4,410 U
231	0204571N	Special Projects	4	7,014	9,786	7,465	-1,109	n 956, 9
232	0204573N	Navy Cover and Deception Program	4	15,366		5,392	-5,392	
233	0204575N	Electronic Warfare (EW) Readiness Support	4	2,352		6,168	-6,168	=
234	0204576N	Counter C3 Development	4	18,967		12,847	-12,847	
235	0205601N	HARM Improvement	4	2,192	3,719			
236	0205604N	Tactical Information System	4	38,017			115.535	315.535 11
237	0205620N	ASW Combat Systems Integration	4	14,638	14,022	14,931	-598	
238	0205633N	Aircraft Equipment Reliability/Maintainability Program	4	1,720	1,988	458	-458	
239	0205658N	Laboratory Fleet Support	4	6,857	5,372	5,877	-361	5,516 U
240	0205667N	F-14 Upgrade	4	263,174	168,000	143,904	8,000	151.904 11
241	0205670N	Tactical Intelligence Processing	4	2,301	2,036	2,155	-18	2.137 II
242	0205674N	Electronic Warfare Counter Response	4	50,054		26,523	-26.523	
243	0205675N	Operational Reactor Development	4	18,310	27,749	39,587	-2,000	37.587 11
244	0206313М	Warine Corps Telecommunications	4	8,526	7,971	8,895	-456	

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			8				Thousands o	of Dollars
Line						FY 88/89		8
8	Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 1989	ADJUSTMENT	PY 1989 C
245	0206623M	Marine Corps Ground Combat/Supporting Arms Systems	•	59,366	33,981	44,136	285	43,851 U
246	0206624M	Marine Corps Combat Services Support	4	2,026	3,422	2,559	-43	2,516 U
247	0206625M	Marine Corps Intelligence/Electronics Warfare Svatems	4	20,005	9,786	32,725	-14,983	17,742 U
248	0206626М	Marine Corps Command/Control/Communications Systems	4	19,710	15,612	25,063	-6,004	19,059 U
249	0206627M	Marine Corps Technical Support Command and Control System		6,325				.
250	0207316N	TACIT RAINBOW	4		10,461	5,896	-49	5,847 U
251	0208010M	Joint Tactical Communications Program (TRI-TAC)	4	5,165	2,314	2,850	-153	2.697 11
252	11100111	Force Enhancements-Active	4		19,334		19,731	19,731 U
	Tactical	Tactical Programs		5,173,554	5,663,053	6.207.442	-215,002	200 440
253	0603783N	Integrated Platform Communications Development	ĸ	36,589		,	18.770	18.770 11
254	0604230N	Warfare Support System	ĸ		29,957	35,786	-2.501	33 286 11
255	0604231N	Tactical Command System	S		24,866	29,728	-3.375	0 502755
256	0604232N	Communication Support System	S)		295,888	305,748	-305,748	
257	0604514N	Navigation Systems	S	639		2,850	-2.850	
258	0604577N	EHF SATCOM	ıcı	42,856			290.297	1 200 00
259	0604777N	NAVSTAR GPS	N.	63,414	52,792	75,578	-32,909	42,669 11
260	N9985090	Navy Command and Control Top Level Warfare	s.		2,925	4,806	-1.270	
261	0301303N	requirements Field Operational Intelligence Office	ĸ					
262	0301326N	PRAIRIE SCHOONER	ĸ					

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Appropriation: 1319 N Research Development Test & Eval Navy

Technical Recommanications Act FY 1987 FY 1987 FY 1989			i				Thousands of	of Dollars	
1909127N Pachinical Recommulsations and Surveillance 5 9,752 21,471 2 2003127N Pachinical Recommulsations and Surveillance 5 9,752 21,471 2 2003127N Pachinical Recommulsations Security (COMSEC) 5 3,511 4,583 4,800 -63 21,471 2 200313N Miletar Satellite Communications Security (COMSEC) 5 3,511 4,583 4,800 -63 21,471 2 2 2 2 2 2 2 2 2	n n						FY 88/89		
0303127N Tochnical Recomnaisaeance and Surveillance 5 9,752 21,471 2	2		Item Nomenclature	Act	FY 1987	FY 1988	FY 1989	ADJUSTMENT	FY 1989
0303401N Communications Security (COMSEC) 5 9,752 9,752 21,471 2 2 2 2 2 2 2 2 2	C		Technical Reconnaissance and Surveillance	ဖ					
0303401N Communications Security (COMSEC) 5 3,511 4,583 4,600 -63 0303401N Special Activities 5 3,511 4,583 4,600 -63 0303411N Special Activities 5 3,511 4,583 4,600 -63 11,611 Special Activities 5 7,682 8,693 7,403 -225,526 75 050372NN Ranje Instrumental Protection 6 29,985 8,586 7,529 -491 060372NN Ranje Instrumental Engineering 6 5,661 2,110 2,904 -793 060372NN Ranje Instrumentalion Systems Development (RISD) 6 11,565 8,586 7,529 -491 060373NN Ranje Instrumentation Systems Development (RISD) 6 5,661 2,110 2,904 -793 060373NN Ranje Instrumentation Systems Development Englineering 6 5,661 2,110 2,904 -793 060373NN Ranje Instrumentation Systems Development (RISD) 6 5,661 2,110 2,904 -793 060373NN Ranje Instrumentation Ranjes Support - Navy 6 2,390 1,888 2,101 -188 060315NN Studies and Analysis Support - Navy 6 5,288 3,337 5,896 -2,286 060515AN Studies and Analysis Group, CNA 6 4,078 4,359 4,517 -1 060515AN Studies and Analysis Group, CNA 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 060515AN Studies Support - Navy 6 1,396 1,283 1,490 -2,622 0708 1,396 1,396 1,390 -2,622 0709 1,396 1,396 -2,622 0709 1,396	4		Satellite Communications	_C	9,752			21.471	21.471
0.304111N Special Activities 5 3,511 4,583 4,800 -63 -63	5		Communications Security (COMSEC)	ß					
Decial Activities Special Activities State Special Activities	40		Milstar Satellite Communications System	ĸ	3,511	4,583	4,800	- 64	4.737
Intelligence and Communications 625,769 913,686 977,239 -225,526 75 0603721N Raviconmental Protection 625,769 913,686 977,239 -225,526 75 0603720N NATO Research and Development (RISD) 6 29,985 7,403 -1,589 -491 060420BN NAT/Ocean Equipment Engineering 6 5,661 2,110 2,904 -793 060425BN Alr/Ocean Equipment Engineering 6 87,780 73,127 103,201 -9,227 9 060425BN Alr/Ocean Equipment Engineering 6 87,780 73,127 103,201 -2,955 -491 060425BN Alr/Ocean Equipment Engineering 6 87,780 73,127 103,201 -2,955 -2,955 060455BN Fresonnel, Training, Simulation, and Human Factors 6 2,396 2,101 -2,955 -2,956 060515AN Studies and Analysis Support - Navy 6 5,286 3,337 5,896 -2,266 060515AN Center factions Deveations Analysis Support - Navy <td>~</td> <td></td> <td>Special Activities</td> <td>S</td> <td></td> <td></td> <td></td> <td>3</td> <td></td>	~		Special Activities	S				3	
0603721N Environmental Protection 6 7,682 8,693 7,403 -1,589 5,814 0603730N NATO Research and Development 6 29,985 7,529 -491 7,038 0604208N Range Instrumentation Systems Development (RISD) 6 11,565 8,586 7,529 -491 7,038 0604208N Air/Ocean Equipment Engineering 6 5,661 2,110 2,904 -793 2,111 0604258N Target Systems Development Engineering 6 87,780 73,127 103,201 -9,227 93,974 0604703N Personnel, Training, Simulation, and Human Factors 6 2,390 1,888 2,101 -9,227 93,974 0605151M Studies and Analysis Support - MC 6 2,390 1,888 2,101 -1,98 1,913 0605153N Studies and Analysis Group, CNA 6 1,078 4,359 4,516 -2,286 3,510 0605155N Paret Tactical Development and Evaluation 6 19,870 19,456 -2,286 1		Intellig	ence and Communications		625,769	913,856	977,239	-225.526	751.713
0604208N NATO Research and Development (RISD) 6 29,985 7,529 -491 7,038 0604208N Range Instrumentation Systems Development (RISD) 6 11,565 8,586 7,529 -491 7,038 0604208N Air/Ocean Equipment Engineering 6 5,661 2,110 2,904 -793 2,111 0604258N Air/Ocean Equipment Engineering 6 87,780 73,127 103,201 -9,227 93,974 0604258N Target Systems Development 6 87,780 73,127 103,201 -2,927 93,974 0605151M Personnel, Training, Simulation, and Human Factors 6 2,390 1,888 2,101 -1,983 1,913 0605151M Studies and Analysis Support - NC 6 5,288 3,337 5,896 -2,286 3,510 0605153N Harine Corps Operations Analysis 6 19,870 19,456 21,532 -2,786 17,763 0605155N Pieet Tactical Development and Evaluation 6 13,670 12,233 1,490	m	0603721N	Environmental Protection	9	7,682	8,693	7.403	-1.589	418
0604208N Range Instrumentation Systems Development (RISD) 6 11,565 8,586 7,529 -491 7,038 0604216N Air/Ocean Equipment Engineering 6 5,661 2,110 2,904 -793 2,111 060425N Target Systems Development 6 87,780 73,127 103,201 -9,227 93,974 0604703N Personnel, Training, Simulation, and Human Factors 6 2,396 1,888 2,101 -1,955 1,025 0605151M Studies and Analysis Support - MC 6 5,288 3,337 5,896 -2,286 3,510 0605152N Studies and Analysis Group, CNA 6 5,288 3,337 5,896 -2,286 3,510 0605153N Marine Corps Operations Analyses 6 4,078 4,359 4,517 -1 4,516 0605155N Flaet Tactical Development and Evaluation 6 19,456 21,532 -3,769 17,763 0605155N Marine Corps Operational Test and Evaluation 6 1,367 1,283 1,490	•	N061E090	NATO Research and Development	9	29,985				10/0
0604218N Air/Ocean Equipment Engineering 6 5,661 2,110 2,904 -793 2,111 0604258N Target Systems Development 6 87,780 73,127 103,201 -9,227 93,974 0604703N Personnel, Training, Simulation, and Human Factors 6 2,390 1,888 2,101 -1,955 1,025 0605151M Studies and Analysis Support - Mc 6 5,288 3,337 5,896 -2,286 3,510 0605152N Studies and Analysis Group, CNA 6 4,078 4,359 4,517 -1 4,516 0605153N Marine Corps Operations Analysis Group, CNA 6 19,870 19,456 21,532 -3,769 17,763 0605155N Fleet Tactical Development and Evaluation 6 19,870 12,233 16,484 -2,622 13,862 0605156N Marine Corps Operational Test and Evaluation 6 1,296 1,283 1,490 -190 1,360 0605502N Small Business Innovative Research 6 57,321 1,283	_	0604208N		9	11,565	8,586	7,529	-491	7.038 11
0604258N Target Systems Development 6 87,780 73,127 103,201 -9,227 9 0604703N Personnel, Training, Simulation, and Human Factors 6 3,946 978 3,980 -2,955 0605151M Studies and Analysis Support - MC 6 2,390 1,888 2,101 -188 0605152N Studies and Analysis Support - Navy 6 5,288 3,337 5,896 -2,286 0605153M Marine Corps Operations Analysis Group, CNA 6 4,078 4,359 4,517 -1 0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 1 0605155M Harine Corps Operational Test and Evaluation 6 1,396 1,293 1,490 -2,622 1 0605156M Harine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -2,622 1 0605502N Small Business Innovative Research 6 57,321 1,290 1,290 1,900		0604218N	Air/Ocean Equipment Engineering	9	5,661	2,110	2,904	-793	
0605151M Studies and Analysis Support - MC 6 2,390 1,888 2,101 -188 0605151M Studies and Analysis Support - MC 6 2,390 1,888 2,101 -188 0605152N Studies and Analysis Support - Navy 6 5,288 3,337 5,896 -2,286 0605153M Marine Corps Operations Analysis Group, CNA 6 4,078 4,359 4,517 -1 0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 1 0605155M Fleet Tactical Development and Evaluation 6 13,670 12,233 16,484 -2,622 1 0605156M Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 0605502N Small Business Innovative Research 6 57,321 -1,290 -190	-	0604258N	Target Systems Development	9	. 87,780	73,127	103,201	-9,227	93.974
0605151M Studies and Analysis Support - MC 6 2,390 1,888 2,101 -188 0605152N Studies and Analysis Support - Navy 6 5,288 3,337 5,896 -2,286 0605153N Harine Corps Operations Analysis Group, CNA 6 19,870 19,456 21,532 -3,769 1 0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 1 0605155N Fleet Tactical Development and Evaluation 6 13,670 12,233 16,484 -2,622 1 0605156M Maxine Corps Operational Test and Evaluation 6 1,283 1,490 -190 0605502N Small Business Innovative Research 6 57,321 1,283 1,490 -190		0604703N	Personnel, Training, Simulation, and Human Factors	9	3,946	978	3,980	-2,955	1.025
0605152N Studies and Analysis Support - Navy 6 5,288 3,337 5,896 -2,286 3,610 0605153H Marine Corps Operations Analysis Group, CNA 6 4,078 4,359 4,517 -1 4,516 0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 17,763 0605155N Fleet Tactical Development and Evaluation 6 1,396 1,283 16,484 -2,622 13,862 0605156H Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 1,300 0605502N Small Business Innovative Research 6 57,321 3,337 5,896 -2,286 3,610 1,300		0605151H	Studies and Analysis Support - MC	9	2,390	1,888	2,101	-188	1,913
0605153H Marine Corps Operations Analysis Group, CNA 6 4,078 4,359 4,517 -1 4,516 0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 17,763 0605155N Fleet Tactical Development and Evaluation 6 13,670 12,233 16,484 -2,622 13,862 0605156M Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 1,300 0605502N Small Business Innovative Research 6 57,321 6 57,321	_	0605152N		9	5,288	3,337	5,896	-2,286	3.610
0605154N Center for Naval Analyses 6 19,870 19,456 21,532 -3,769 17,763 0605155N Fleet Tactical Development and Evaluation 6 13,670 12,233 16,484 -2,622 13,862 0605156M Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 1,300 0605502N Small Business Innovative Research 6 57,321 57,321		0605153H		9	4,078	4,359	4,517	1	4.516
0605155N Fleet Tactical Development and Evaluation 6 13,670 12,233 16,484 -2,622 13,862 0605156M Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 1,300 0605502N Small Business Innovative Research 6 57,321 6 57,321		0605154N	Center for Naval Analyses	9	19,870	19,456	21,532	-3,769	
0605156M Marine Corps Operational Test and Evaluation 6 1,396 1,283 1,490 -190 0605502N Small Business Innovative Research 6 57,321		N5515090	Fleet Tactical Development and Evaluation	vc	13,670	12,233	16,484	-2,622	
0605502N Small Business Innovative Research 6 57,321		0605156M	Marine Corps Operational Test and Evaluation	9	1,396	1,283	1,490	-190	1.300
		0605502N	Small Business Innovative Research	•	57,321				

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Department of the Navy FY 1989 R D T & E Program

Exhibit R-1

Appropriation: 1319 N Research Development Test & Eval Navy

							Date: F	Date: February 1988
							Thousands	of Dollars
Line	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 Adjustment	S AMENDED e FY 1989 C
281	0605804N	Technical Information Services	9	2,524	2,640	3,362	-763	2,599 U
282	0605854M	Marine Corps Development Center Support	4	4,039	4,691	13,484	-8,238	5,246 U
283	0605857N	International RDT6E	9	957	1,254	3,974	-281	9,693 U
284	NT985090	RDISE Laboratory and Pacilities Management Support	9	49,673	53,645	55,529	-3,778	51,751 U
285	0605862N	RDISE Instrumentation and Materiel Support	9	20,579	41,494	30,241	-326	29,915 U
286	NE 985090	RDMsE Ship and Aircraft Support	9	73,795	90,726	94,171	-7.611	86.560 11
287	0605864N	Test and Evaluation Support	9	296,864	310,000	336,526	-11,161	325.365 11
288	0605865N	Operational Test and Bvaluation Capability		7,310	8,720	8,791	-200	8.591
289	M1782030	Marine Corps Tactical Exploitation of National	9	3,180	958	1,080	-111	
290	0605872N	Productivity Investments	9		3,213	263	-5	1 192
291	0305111N	Weather Service	9	069	948	988	- 1-	11 678
292	N09150E0	Defense Meteorological Satellite Program (DMSP)	·ve	2,691	3,893	2,280	-144	
293	0708011N	Industrial Preparedness	9	37,961	42,331	45,952	-2,470	43,482 U
	Defensewi	Defensewide Mission Support		750,895	700,563	773,576	-59,203	714,373
Total		Research Development Test & Eval Navy		9,292,433	9,512,917	10,044,819	-828,619	9,216,200

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Department of the Air Force FY 1989 R D T & E Program

Exhibit R-1

Summary Recap of Research Categories Research Advanced Development Exploratory Development Advanced Development Engineering Development Management and Support Research and Development (FYDP Program 6) Operational Systems Development Total Research Development Test & Eval AF Summary Recap of Budget Activities	FY 1987			Thousands o	of Dollars
elopment pment elopment elopment support velopment (FYDP Program 6) tems Development Development Test & Eval AF f Budget Activities					
Elopment pleant support velopment (FYDP Program 6) tems Development Test & Eval AF f Budget Activities	221,085	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED FY 1989
elopment elopment support velopment (FYDP Program 6) tems Development Development Test & Eval AF f Budget Activities	221,085				
elopment pment Support velopment (FYDP Program 6) tems Development Test & Eval AF Development Activities		198,401	245,522	. 858.85	199.667
Function of the propert of the prope		556,970	630,711	-47,846	582,865
Support velopment (FYDP Program 6) tems Development Development Test & Eval AF f Budget Activities	3,549,703	4,263,525		-1,923,994	2,497,928
velopment (FYDP Program 6) tems Development Development Test & Eval AF f Budget Activities	1,037,023	3,969,553 548,840	6,785,683 597,916	-1,425,218	5,360,465
tems Development Development Test & Eval AF f Budget Activities	-				
Development Test & Eval AF f Budget Activities	6,113,870	9,537,289 5,628,099	12,681,754 5,046,817	-3,473,586	9,208,168
f Budget Activities	15,050,523	15,165,388	17,728,571	-2,796,471	14,932,100
Technology Base	783.131	756. 371	666 360		
Advanced Technology Development	687,487	754.813	986.771	-202 546	764,532
Strategic Programs	5,592,700	5,886,847	8,137,069	-2.778.183	5.358.886
Tatelia Frograms	3,631,177	4,031,360	4,210,694		4.265.852
intelligence and communications Defensewide Wission Support	2,293,434	,132,07	2,024,634		2,025,497
	2,062,594	1,604,923	1,493,170	221,938	1,715,108
Total Research Development Test & Eval AF	15,050,523	15,165,388	17,728,571	-2,796,471	14,932,100
Summary Recap of FYDP Programs				•	
Strategic Forces					
General Purpose Forces	137,160	564,401	545,496	-76,672	468,824
Intelligence and Communications	4.022.811	3 800 463		210,854	1,047,203
Airlift/Sealift		26,922	128,397	-115.463	3,832,925
	37,318	59,965	83,367	-79	83,388
mesmarch and Development (FYDP Program 6) Central Supply and Waintenance	8,936,653	9,537,289	12,681,754		9,208,168
Training Medical and Other	4	103,705	120,840	-1,082	119
support of other mations Special Operations Forces	2,721	3,107	3,156	155,263	3,737
Total Research Development Test & Eval AF	15,050,523	15.165.388	17.728.571	- 2 70¢ 471	000

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Appropriation: 3600 F Research Development Test & Eval AP

Department of the Air Force FY 1989 R D T & E Program

Exhibit R-1

		a de la constantina della cons						Thousands o	of Dollars
1	6						1		
0601101F In-House Laboratory Independent Research 1 14,996 15,653 16,733 -6,510 10,223 0601102F Defense Research Sciences 1 197,619 182,746 204,196 -14,752 189,444 06021012F Companic Research Intiatives 1 197,619 182,748 204,196 -14,752 189,444 06021012F Haterials 1 197,619 14,656 34,696 -24,593 34,838 06021012F Haterials 1 197,619 170,861 67,696 72,659 -2,790 69,269 06022012F Haterials 1 197,619 61,813 69,733 -5,702 64,531 06022012F Haterials 1 197,619 61,813 69,733 -5,702 64,531 06022012F Haterials 1 197,619 11,916 11,916 -5,784 31,026 06022012F Haterials 1 197,619 11,120 11,120 06022012F Haterials 1 197,619 11,120 11,120 06022012F Haterials 1 197,619 11,120 11,120 06022012F Haterials 1 19,645 -2,639 -2,630 06022012F Haterials 1 19,645 -2,639 -2,630 06022012F Haterials 1 19,645 -2,639 -2,630 06022012F Haterials 1 19,645 -2,639 -2,639 06022012F Haterials 1 19,645 -2,639 0	o Z		Item Nomenclature	Act	FY 1987	FY 1988	PRES BUDGET FY 1989	FY 1989	AMENDED FY 1989
0602102F Defense Research Sciences 1 137,619 197,619 197,718 16,733 -6,510 10,233 0 601103F University Research Initiatives 1 9,469 192,748 204,196 -14,752 189,448 0 602101F Geophysics 1 37,552 35,832 -24,593 -24,593 34,838 0 602202F Materials 1 37,652 54,856 63,064 -4,697 58,367 0 602202F Human Systems Technology 1 70,861 67,696 54,996 -5,195 69,269 0 602203F Ascospace Pright Dynamics 1 70,861 61,813 69,733 -5,195 69,269 0 602203F Ascospace Propulation 1 47,460 48,946 54,996 -5,195 69,269 0 602203F Ascospace Propulation 1 23,518 36,910 5,541 36,910 5,541 0 602203F Parconnal, Taining and Similation 1 23,542 5,640 6,046 5,734 36,910	-	31011090	In-House Laboratory Independent Research	-					
060103F University Research Initiatives 1 137,619 182,746 204,196 -14,732 189,446 1000201F 2000201F 20002001F 2000201F 200020000000000000000000000000000000	01	0601102F	Defense Research Science	!	200	13,633	16,733	-6,510	10,223
0.002101P Complysics 1 0.468 24,593 -24,593 34,898 1 0.002101P 0.002201P 0.00220		20011030		-	197,619	182,748	204,196	-14,752	189,444
0602102F Haterials 1 37,552 35,835 -7,598 34,838 0602102F Haterials 1 54,290 54,856 63,064 -4,697 58,387 0602102F Human Systems Technology 1 70,861 67,698 72,059 -2,790 69,269 0602202F Human Systems Technology 1 47,460 48,946 54,996 -5,195 49,801 0602203F Asrospace Propulation 1 59,159 61,813 69,733 -5,202 64,531 0602203F Asrospace Avionics 1 23,518 31,915 36,810 -5,784 31,025 06,2467 06,2204F Asrospace Avionics 1 23,518 31,915 06,946 -5,784 31,025 06,2467 06,2204F Asrospace Avionics 1 23,518 31,915 06,946 -5,784 31,025 06,2467		AFOITTO OF	University Research Initiatives	7	8,468		24,593	-24,593	
0602201F Amerospace Flight Dynamics 1 54,290 54,656 63,064 -4,697 0602201F Amerospace Flight Dynamics 1 70,861 67,698 72,059 -2,790 0602202F Human Systems Technology 1 47,460 48,946 54,996 -5,195 0602203F Aerospace Propulsion 1 59,159 61,813 69,733 -5,202 0602203F Aerospace Avionics 1 23,518 31,916 54,996 -5,195 0602203F Personnel, Training and Simulation 1 23,518 31,916 5,784 -5,784 0602206F Civil Engineering and Smultonmental Quality 1 6,345 6,640 6,046 -5,784 0602202F Rocket Propulation 1 37,990 34,284 -2,619 -2,619 0602202F Conventional Munitions 1 37,990 34,846 37,304 -2,619 0602202F Conventional Munitions 1 77,695 75,640 84,061 1,120		0602101F	Geophysics	-	37,552	35,832	42,436	-7,598	34,838
0602201F Human Systems Technology 602202F Human Systems Technology 602202F Human Systems Technology 602202F Human Systems Technology 602203F Aerospace Propulation 602203F Aerospace Propulation 602203F Aerospace Propulation 602203F Aerospace Avionics 602203F Advanced Weapons 602203F Advanced Weapons 602203F Aerospace Avionics 602203F Aerospace Avionics 602203F Aerospace Avionics 602203F Aerospace Avionics 602203F Advanced Weapons 602203F Aerospace Avionics 602203F Advanced Weapons 602203F Aerospace Avionics 602203F Aerospace Avionics 602203F Advanced Weapons 602203F Aerospace Avionics 602203F Aerospace Avion	_	U602102F	Materials	-	54,290	54,856	63,064	-4,697	58.367
6602202F Human Systems Technology 1 47,460 48,946 54,996 -5,195 49,801 6602203F Acrospace Propulsion 1 59,159 61,813 69,733 -5,195 49,801 6602203F Acrospace Avionics 1 61,822 59,773 73,073 -6,606 64,453 6602205F Personnel, Training and Simulation 1 23,518 31,916 5,784 31,026 6602205F Civil Engineering and Environmental Quality 1 6,345 6,640 -5,784 31,026 6602202F Civil Engineering and Environmental Quality 1 37,972 38,423 44,283 -5,131 39,152 6602202F Conventional Hunitions 1 37,990 34,846 37,304 -2,619 34,685 6602202F Conventional Hunitions 1 77,695 75,640 84,061 1,120 85,181 76602203F Personnel Utilization Technology 1 77,695 75,431 876,233 -2,839 44,007		0602201F	Aerospace Flight Dynamics	-	70,861	67,698	72,059	-2.790	096 09
0602203F Aerospace Propulsion 1 59,159 61,913 69,733 -5,202 64,531 0602203F Aerospace Avionics 1 61,822 59,773 73,073 -6,606 66,467 0602205F Personnel, Training and Simulation 1 23,518 31,916 -5,784 31,026 0602205F Civil Engineering and Environmental Quality 1 37,926 6,046 -5,046 31,026 0602302F Rocket Propulsion 1 37,930 34,845 -5,131 39,152 0602602F Conventional Munitions 1 37,990 34,846 -2,619 34,685 0602702F Conventional Munitions 1 77,695 75,640 84,007 34,685 0602702F Conventional Utilization Technology 1 76,541 84,061 1,120 85,181 Technology Personnel Utilization Technology 1 8,081 75,540 84,007 75,540 84,007 Technology Logistics Systems Technology 2 11,477	_	0602202F	Human Systems Technology	-	47,460	48,946	54,996	. 5.195	40 00
0602204F Aerospace Avionics 1 61,822 59,773 73,073 -6,606 66,467 0602205F Personnel, Training and Simulation 1 23,518 31,916 36,810 -5,784 31,026 0602205F Civil Engineering and Environmental Quality 1 6,345 6,446 6,046 -5,784 31,026 0602502F Rocket Propulsion 1 37,972 38,423 44,283 -5,131 39,152 0602602F Advanced Weapons 1 37,990 34,846 37,304 -2,619 34,685 0602702F Command Control and Communications 1 77,695 75,640 84,061 1,120 85,181 7echnology Personnel Utilization Technology 1 8,081 75,640 84,061 1,120 85,181 7echnology Base Logistics Systems Technology 2 11,477 9,574 19,645 -3,209 16,436 0603109F INSMS/ICNIA 2 1102,453 65,300 40,958 -3,235		0602203F	Aerospace Propulsion	1	59,159	61,813	69,733	-5.202	
0602206F Personnel, Training and Simulation 1 23,518 31,916 36,810 -5,784 31,026 0602206F Civil Engineering and Environmental Quality 1 6,345 6,640 6,046 -505 5,541 0602302F Rocket Propulation 1 37,972 38,423 44,283 -5,131 39,152 0602602F Conventional Munitions 1 37,990 34,646 -2,619 34,685 0602702F Conventional Munitions 1 37,990 46,846 -2,619 34,685 0602702F Command Control and Communications 1 77,695 75,640 84,061 1,120 85,181 Technology Base Technology Colspan="6">Colspan="6">Technology Colspan="6">Technology Colspan="6">Colspan="6">Technology Colspan="6">Colspan="		0602204F	Aerospace Avionics	1	61,822	59,773	73-073	303 3-	
0602206F Civil Engineering and Environmental Quality 1 6,345 6,640 6,046 -505 5,541 0602302F Rocket Propulsion 1 37,972 34,846 -5,131 39,152 0602602F Advanced Weapons 1 37,990 34,846 -2,619 34,685 0602702F Conwentional Munitions 1 39,301 40,587 46,946 -2,619 34,685 0602702F Command Control and Communications 1 77,695 75,640 84,061 1,120 85,181 0602702F Personnel Utilization Technology 1 8,081		0602205F	Personnel, Training and Simulation	1	23,518	31.916	96 910		
0602302F Rocket Propulsion 1 37,972 38,423 44,283 -5,131 5,541 0602601F Advanced Weapons 1 37,990 34,846 37,304 -2,619 34,685 0602602F Conventional Munitions 1 39,301 40,587 46,846 -2,619 34,685 0602702F Command Control and Communications 1 77,695 75,640 84,061 1,120 85,181 0602703F Personnel Utilization Technology 1 8,081		0602206F	Civil Engineering and Environmental Quality	-	345. 3	9 9	070.00	\$0/ 'C-	
Advanced Weapons Advanced Weapons Conventional Munitions Conventional Munitions Conventional Munitions Conventional Munitions Conventional Munitions 1 37,990 34,846 37,304 -2,619 34,685 Conventional Munitions 1 39,301 40,587 46,846 -2,619 34,685 Personnel Utilization Technology Personnel Utilization Technology 1 77,695 75,640 84,061 1,120 85,181 9,974 19,645 -3,701 782,532 Logistics Systems Technology 2 11,477 9,574 19,645 -3,209 16,436 11,436 1		0602302F	Rocket Propulsion			0000	97079	-202	
Advanced Weapons Conventional Munitions 1 39,301 40,587 46,846 -2,839 44,007 Personnel Utilization Technology Personnel Utilization Technology 1 8,081 1 8,081 TAB3,131 755,371 876,233 -93,701 782,532 Logistics Systems Technology 2 11,477 9,574 19,645 -3,209 16,436 INEWS/ICNIA 2 102,453 85,300 40,958 -3,535 37,423		21030030		7	37,972	38,423	44,283	-5,131	39,152 u
Conventional Munitions Command Control and Communications Command Control and Communications Dersonnel Utilization Technology Base Logistics Systems Technology INEWS/ICNIA Conventional Munitions 1 77,695 75,640 84,061 1,120 85,181 8,081 785,371 875,371 876,233 -93,701 782,532 11,477 9,574 19,645 -3,209 16,436 37,423		A1007000	Advanced Weapons	-1	37,990	34,846	37,304	-2,619	
Command Control and Communications 1 77,695 75,640 84,061 1,120 85,181 Personnel Utilization Technology 1 8,081		0602602F	Conventional Munitions	4	39,301	40,587	46.846	-2 830	
Dersonnel Utilization Technology 1 8,081 1.120 85,181 1.1		0602702F	Command Control and Communications	-	77,695	75.640	84.061	6000	/00/9#
Logistics Systems Technology 2 11,477 9,574 19,645 -3,209 INEWS/ICNIA 2 102,453 85,300 40,958 -3,535		0602703F	Personnel Utilization Technology	-	8,081			1,120	
Logistics Systems Technology 2 11,477 9,574 19,645 -3,209 INEWS/ICNIA 2 102,453 85,300 40,958 -3,535		Technolog	ly Base		783,131	755.371	250 350		
INEWS/ICNIA 2 102,453 85,300 40,958 -3,535		0603106F	Logistics Systems Technology	~	11.477	45.50	5576060	10/ '56-	782,532
2 102,453 85,300 40,958 -3,535		0603109F	INEWS/ICNIA	•			19,045	-3,209	
				7	102,453	85,300	40,958	-3,535	37,423 1

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Department of the Air Force FY 1989 R D T & E Program

Exhibit R-1

Date: February 1988

Appropriation: 3600 F Research Development Test & Eval AF

O 30,114 U 21,439 U 8,038 U 22,259 U 23,980 U 35,667 U 8,995 U 244,767 U AMENDED FY 1989 21,099 32,666 27,921 14,028 25,132 Thousands of Dollars FY 1989 ADJUSTMENT -6,821 -11,529 -6,259 -1,523 -6,726 -4,705 -5,427 -5,157 -20,552 -8,924 -2,521 -1,014 -61,521 35,667 -3,213 FY 88/89 PRES BUDGET FY 1989 41,643 27,825 28,260 33,348 24,780 37,823 20,552 12,743 32,904 6,259 26,655 15,042 306,288 12,208 20,000 10,030 20,602 8,481 FY 1988 26,000 56,999 15,673 18,242 2,992 22,352 22,000 183,000 6,259 27,312 39,515 20,937 5,604 2,723 FY 1987 25,210 23,694 6,685 2,196 4,072 16,594 28,859 5,604 4,957 26,500 5,555 1,632 Act Crew Systems and Personnel Protection Technology Advanced Electronics for Aerospace Vehicles (H) DoD Common Programming Language (Ada) Advanced Personnel, Training and Simulation Technology Aerospace Fuels and Propulsion Technology (H) Cartographic Application for Tactical and Strategic Systems (H) National Aero Space Plane Technology Program Aerospace Propulsion Subsystems Integration Aerospace Propulsion and Power Technology Advanced Avionics for Aerospace Vehicles Advanced Fighter Technology Integration Space and Missile Rocket Propulsion Aerospace Structure and Materials Advanced Avionics Integration Aerospace Vehicle Technology Item Nomenclature Weapon Systems Power Concept Development Lincoln Laboratory EW Technology Program Line Element No Number 0603202F 0603203F 0603205F 0603208F 0603215F 0603211F 0603216F 0603226F 0603217F 0603231F 0603245F 0603227F 0603248F 0603250F 0603253F 0603259F 0603269F 0603270F 0603302F 20 21 22 23 24 25 28 59 30 31

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Department of the Air Force FY 1989 R D T & E Program

Date: February 1988

Exhibit R-1

Appropriation: 3600 F Research Development Test & Eval AF

Page				i	***************************************			Incusands or Dollars	Dollars
0.003353F Hypervelocity Hiseliae 0.003532F Hypervelocity Hiseliae 0.0034012 Advanced Spacecraft Technology 2 12,932 4,000 10,103 -2,106 0.034012 Technology Systems Environmental Interactions 2 126,426 100,000 58,127 -14,041 4,003 0.034012 Technology Systems Environmental Interactions 2 126,426 100,000 58,127 -14,041 4,003 0.034012 Technology Circuits 2 1,442 11,552 31,519 -6,218 2,	No		Item Nomenclature	Act	FX 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED 6
Decision Advanced SpaceCraft Technology 2 12,932 4,000 10,103 -2,108 10,0340 2, 3,491 3,825 3,934 -4 -4 -4 -4 -4 -4 -4	38	0603363F	Hypervelocity Missile		9,273	10,626	7,783	-1,206	6.577
Space Systems Environmental Interactions 2 3,491 3,825 3,934 -4	39	0603401F	Advanced Spacecraft Technology	8	12,932	4,000	10,103	-2,108	7.995
Very High Speed Integrated Circuits 2 126,426 100,000 59,127 -14,041 4		0603410F	Space Systems Environmental Interactions	N	3,491	3,825	3,934	4	3,930
Conventional Weapons Technology (H) 2 27,984 11,552 31,519 -6,218 2 Advanced Weapons Technology (H) 2 1,442 71,650 34,766 39,728 7 Manpower and Personnel Systems Technology (H) 2 1,442 5,276 5,838 -504 Civil and Environmental Engineering Technology (H) 2 2,714 5,220 9,634 -1,608 Civil and Environmental Engineering Technology (H) 2 2,714 5,220 9,634 -1,608 Advanced Communications Technology (H) 2 6,980 4,128 12,249 -2,010 1,084 Advanced Computer Technology 2 6,980 4,128 12,249 -2,010 1,084 Connter-Counterneasures (CCH) (H) 2 5,917 -1,608 Connter-Counterneasures (CCH) (H) 2 5,917 -1,608 Training Systems Technology Development 2 14,195 18,929 18,794 -18,794 Call Technology Development 2 13,448 30,000 47,696 -28,901 16 Technology Development 3 4,443 4,444		0603452F	Very High Speed Integrated Circuits	0	126,426	100,000	58,127	-14,041	44.086
Advanced Weapons Technology 2 39,088 71,650 34,766 39,728 7 Wanther Systems Technology (H) 2 4,047 5,276 5,838 -504 Givil and Environmental Engineering Technology 2 7,803 11,827 11,324 -2,310 C3I Subsystem Integration 2 7,803 11,827 11,524 -2,310 Advanced Communications Technology (H) 2 4,956 4,128 12,249 -2,010 11 Advanced Computer Technology 2 6,980 4,128 12,249 -2,010 11 Advanced Computer Technology 2 6,980 4,128 12,249 -2,010 11 Counter-Countermeasures (CCM) (H) 2 4,946 47,600 -47,600 -47,600 Counter-Countermeasures (CCM) (H) 2 4,946 47,600 -47,600 -18,794 Training Systems Technology Development 2 1,4195 18,929 18,794 -18,794 Technology Development 2 13,486 776 -28		0603601F	Conventional Weapons	N	27,984	11,552	31,519	-6,218	25,301
Hampower and Personnel Systems Technology (H) 2 1,442 5,276 5,838 -504		JE098090	Advanced Weapons Technology		39,088	71,650	34,766	39,728	74.494
Weather Systems - Adv Dev 2 4,047 5,276 5,838 -504 Civil and Environmental Engineering Technology 2 7,803 11,827 11,324 -2,310 Civil and Environmental Engineering Technology 2 2,714 5,220 9,634 -1,608 Advanced Communications Technology (H) 2 6,986 4,128 12,249 -2,010 11 Advanced Computer Technology 2 38,443 4,128 12,249 -2,010 11 Electronic Combat Technology 2 38,443 4,946 Counter-Countermeasures (CCM) (H) 2 5,917 Training Systems Technology 2 1,823 276 47,600 -47,600 Training Systems Technology 2 1,823 276 47,594 -18,794 C31 Technology Development 2 13,448 30,000 47,696 -28,901 116 Tachnology Development 2 13,448 30,000 47,696 -28,901 116 Tachnology Development 2 13,448 30,000 47,696 -20,546 788 Tachnology Development 2 13,448 30,000 47,696 -20,901 118 Tachnology Development 2 13,448 30,000 47,696 -20,901 118 Tachnology Development 2 13,448 30,000 47,696 -20,901 Tachnology Development 2 13,448 30,000 47,696 Tachnology Develop		0603704F		8	1,442				
Civil and Environmental Engineering Technology 2 7,803 11,927 11,324 -2,310 C31 Subsystem Integration Advanced Communications Technology (H) 2 6,980 4,128 12,249 -2,010 1) Advanced Communications Technology Electronic Combat Technology Chemical Warfare Defense (H) 2 6,980 4,128 12,249 -2,010 1) Counter-Countermeasures (CCM) (H) 2 4,946 Counter-Countermeasures (CCM) (H) 2 5,917 Training Systems Technology DoD Software Engineering Institute 2 14,195 18,929 18,794 -18,794 C31 Technology Development 2 13,448 30,000 47,696 -28,901 18 Technology Development 754,813 986,771 -202,546 788		3101E090	Weather Systems - Adv Dev	8	4,047	5,276	5,838	-504	5.334
C3I Subsystem Integration 2 2,714 5,220 9,634 -1,608 Advanced Communications Technology 2 4,956 4,128 12,249 -2,010 1 Advanced Communications Technology 2 6,980 4,128 12,249 -2,010 1 Electronic Combat Technology 2 38,443 47,600 -47,600 -47,600 Chemical Warfare Defense (H) 2 5,917 4,946 471 -1 Counter-Countermeasures (CCM) (H) 2 5,917 -1,823 276 471 -1 Training Systems Technology 2 14,195 18,929 18,794 -18,794 Counter-Countermeasures (CCM) (H) 2 14,195 18,929 18,794 -18,794 Counter-Countermeasures (CCM) (H) 2 14,195 18,929 18,794 -18,794 Counter-Countermeasures (CCM) (H) 2 13,448 30,000 47,696 -28,901 11 Training Systems Technology Development 2 13,48 30,000 47,696		0603723F	Civil and Environmental Engineering Technology	8	7,803	11,827	11,324	-2,310	9.014
Advanced Communications Technology (H) 2 4,956 4,128 12,249 -2,010 1 Advanced Communications Technology 2 6,980 4,128 12,249 -2,010 1 Electronic Computer Technology 2 38,443 47,600 -47,600 -47,600 -47,600 Chemical Warfare Defense (H) 2 4,946 47,600 -47,600 -1 Counter-Countermeasures (CCM) (H) 2 5,917 2 1,823 276 471 -1 Training Systems Technology Systems Technology Development 2 14,195 18,929 18,794 -18,794		0603726F	C31 Subsystem Integration	7	2,714	5,220	9,634	-1,608	8.026
Advanced Computer Technology 2 6,980 4,128 12,249 -2,010 Electronic Combat Technology 2 38,443 47,600 -47,600 -47,600 Chemical Warfare Defense (H) 2 4,946 47,600 -47,600 -47,600 Counter-Countermeasures (CCH) (H) 2 1,823 276 471 -1 Training Systems Technology 2 14,195 18,929 18,794 -18,794 C31 Technology Development 2 13,448 30,000 47,696 -28,901 1 Technology Development 687,487 754,813 986,771 -202,546 78		0603727F	Advanced Communications Technology (H)	8	4,956			•	
Electronic Combat Technology		0603728F	Advanced Computer Technology	8	086'9	4,128	12.249	010 6-	966 01
Chemical Warfare Defense (H) 2 4,946 Counter-Countermeasures (CCM) (H) 2 5,917 Training Systems Technology 2 1,823 276 471 -1 470 DoD Software Engineering Institute 2 14,195 18,794 -18,794 C3I Technology Development 2 13,448 30,000 47,696 -28,901 18,795 I Technology Development 687,487 754,813 986,771 -202,546 784,225		0603743F	Electronic Combat Technology	~	38,443		47.600	272.7	657/07
Counter-Countermeasures (CCH) (H) 2 5,917 471 -1 470 Training Systems Technology 2 14,195 18,929 18,794 -18,794 DoD Software Engineering Institute 2 14,195 18,929 18,794 -18,794 C3I Technology Development 2 13,448 30,000 47,696 -28,901 18,795 I Technology Development 687,487 754,813 986,771 -202,546 784,225		0603745F	Chemical Warfare Defense (H)	N	4,946				
Training Systems Technology DoD Software Engineering Institute C31 Technology Development Training Systems Technology DoD Software Engineering Institute 2 14,195 18,929 18,794 -18,794 C31 Technology Development 2 13,448 30,000 47,696 -28,901 18,795 Technology Development C687,487 754,813 986,771 -202,546 784,225		0603750F		7	5,917				
DoD Software Engineering Institute 2 14,195 18,929 18,794 -18,794 C3I Technology Development 2 13,448 30,000 47,696 -28,901 18,795 3 Technology Development 687,487 754,813 986,771 -202,546 784,225		0603751F	Training Systems Technology	N	1,823	276	471	. 7	9
C3I Technology Development 2 13,448 30,000 47,696 -28,901 18,795 3 Technology Development 687,487 754,813 986,771 -202,546 784,225		0603752F	DoD Software Engineering Institute	8	14,195	18,929	18.794	-18-794	
687,487 754,813 986,771 -202,546		0603789F	C31 Technology Development	8	13,448	30,000	47,696	-28,901	U 967,81
		Advanced	Technology Development		687,487	754,813	986,771	-202.546	784.225

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Date: February 1988

Department of the Air Force FY 1989 R D T & E Program Appropriation: 3600 F Research Development Test & Eval AF

			i				Thousands of Dollars	of Dollars
Line No	Program e Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED 6 FY 1989 C
99	0603110F	Special Evaluation Program	m					
57	0603111F	Heridian	m					
58	0603265F	Long Range Conventional Cruise Missile	m				20,000	000°05
59	0603311F	Advanced Strategic Missile Systems	e	149,997	133,640	151,979	-143	151.836 !!
09	0603312F	Advanced Concepts	m					
61	0603364F	Short Range Attack Missile II (SRAH II)	m	65,547	174,320	231,589	-122	231,467 U
62	329E090	Relocatable Target Capability Program	m	4,494	196'6	23,723	-4,018	U 90'.61
63	0603368F	Air Defense Battle Management Technology	m	4,198		35,820	-35,820	
99	0603369F	Cruise Missile Engagement Systems Technology	m	503		35,035	-35,035	5
9	0603424F	Cruise Missile Surveillance Technology	m	14,843				=
99	0603716F	Atmospheric Surveillance Technology	m	16,014		1,604	-1,604	
67	0603717F	Technical On-site Inspection Program	e	10,452	10,627	3,813	5.478	9.291 11
89	0603735F	WWMCCS Architecture	е	5,859		289	-289	
69	0603738F	ADI Surveillance Technology	m			138,900	-138,900	· =
70	0604216F	WWABNCP System Replacement	e			13,796	-13.796	
11	0604226F	B-18	m	115,728	366,841	386,726	-165,135	221,591 U
72	0604234F	Common Strategic Rotary Launcher	m	12,303	5,693	947	7	
73	0604240F	B-2 Advanced Technology Bomber	m					
74	0604312F	ICBM Modernization	m	1,143,499	1,068,268	3,461,672	-2,428,781	1,032,891 U

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Department of the Air Force FY 1989 R D T & E Program Appropriation: 3600 F Research Development Test & Eval AF

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Date: February 1988

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U 10,000 U 8,333 U 3,176 U U 690,18 1,210 U 20,298 U U 518,07 22,982 U 2,533 U 1,751 U 1,667 U 19,201 U 25,362 U AMENDED FY 1989 957 Thousands of Dollars FY 1989 ADJUSTMENT 10,000 7 -385,812 -3,007 -1,003 -138,546 20,298 18,034 -1,022 F -17 -1,645 FY 88/89 PRES BUDGET FY 1989 958 385,812 11,340 4,179 1,203 24,004 199,615 52,582 2,536 1,754 1,671 19,218 27,007 7,969 3,577 FY 1988 131,852 12,926 4,019 84,295 939 20,321 57,624 2,256 23,410 2,147 31,326 5,204 8,444 19,172 4,719 28,188 12,793 421 52,439 13,715 1,513 FY 1987 169,211 34,923 42,882 2,874 3,234 15,917 11,721 29,895 15,338 Act War Planning Automated Data Processing (ADP) - SAC Strategic Conventional Standoff Capability (SCSC) Ballistic Missile Early Warning System (BMEWS) PACCS and WWABNCP System EC-135 Class V Mods Distant Early Warning (DEW) Radar Stations Ballistic Missile Tactical Warning/Attack Assessment System Joint Surveillance System Systems Survivability (Nuclear Effects) Aircraft Survivability Enhancements Air Launched Cruise Missile (ALCM) Over-the-Horizon Backscatter Radar Surveillance Radar Stations/Sitès NCMC - Space Defense Systems Item Nomenclature Advanced Cruise Missile Space Defense System NCMC - TW/AA Systems Minuteman Squadrons SAC Communications KC-135 Squadrons Program Line Element No Number 0604326F 0604361F 0604406F 0604711F 0101120F 0101135F 0101142F 0101213F 0101312F 0101313F 0101316F 0102310F 0102311F 0102313F 0102325F 0102411F 0102412F 0102417F 0102423F 16

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Department of the Air Force FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1 Appropriation: 3600 F Research Development Test & Eval AF

							Thousands of Dollars	f Dollars
Line	Program e Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
46	0102424F	SPACETRACK	m	14,319	7,600	10,966	-1,609	9,357 U
95	0102431F	Defense Support Program	m	112,399	88,462	95,214	-11,082	84,132 U
96	0102432F	Submarine-Launched Ballistic Missile (SLBM) Radar	m	13,727	17,246	10,175	-10	10,165 U
97	0102433F	NUDET Detection System .	m	23,212	7,369	10,932	-10	10,922 U
86	0102436F	Command Center Processing and Display System	m	21,442	29,437	38,064	-11,125	26,939 U
66	0102822F	LEO	m					
100	0303131F	Minimum Essential Emergency Communications Network (MERCN)	m	56,619	50,402	34,231	6,802	41,033 U
101	0303152F	World-Wide Military Command and Control Systems, Information System	m	165'9	5,087	5,319	-3,002	2,317 U
102	0303154F	WWMCCS Information System Joint Program Management Office	m	94,928	21,406	91,425	-25,062	n E9E'999
103	0303601F	Milstar Satellite Communications System (AF	en	258,562	198,226	310,353	9-	310,347 U.
104	0303603F	Milstar Satellite Communications System	m	473,205				
105	0305124F	Special Applications Program	m					
106	0305172F	BERNIE	m	٠				
101	0305892F	Special Analysis Activities	m					.*
108	0401123F	Military Airlift Group (IF)	m	8,664	9,952	192	1	193 U
	Strategi	Strategic Programs	•	5,592,700	5,886,847	8,137,069	-2,778,183	5,358,886
109	0603107F	Technical Evaluation System	4				•	
110	0603230F	Advanced Tactical Fighter	4	261,342	498,054	702,995	-712	702,283 U
111	0603239F	Unmanned Air Reconnaissance System (UARS)	4	3,787		8,831	-8,831	D

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Department of the Air Force FY 1989 R D T & E Program

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		į				Thousands o	of Dollars
Program Line Element No Number	in it Item Nomenclature	Act	FY 1967	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	AMENDED 6 FY 1989 C
112 0603244F	4F Aircraft Non-Nuclear Survivability (H)	4	2,374				D
113 0603256F	6F CV-22A	4	3,145		25,584	-25,584	5
114 0603260F	OF Intelligence Advanced Development	4	4,867	4,058	5,796	-802	4,994 U
115 0603261F	IF PAVE RUNNER Advanced Development	4					
116 0603307F	7F Air Base Operability Advanced Development	4	5,750	2,988	5,132	4-	5,128 U
117 0603320F	OF Low Cost Anti-Radiation Seeker	4	16,795	13,533	12,465	-12	12,453 U
118 0603437F	7F HAVE DJINN	4					
119 0603609F	9F Millimeter Wave Seekers	4	4,744			-	5
120 0603714F	4F DoD Physical Security Equipment - Exterior	4	950	806	937	7	936 U
121 0603742F	2F Combat Identification Technology	4	5,948		1,951	-5	1,949 U
122 0603749F	9F C3CM Advanced Systems	4	4,974		1,872	-1,872	
123 0603801F	1F Special Programs	4					
124 0604201F	1F Aircraft Avionics Equipment Development	4	23,169	16,934	22,648	-3,018	19,630 U
125 0604212F	2F Aircraft Equipment Development	4	4,636	1,931	2,139	-1,001	1,138 U
126 0604218F	8F Engine Hodel Derivative Program (EMDP)	4	61,025	919	982	-25	957 U
127 0604219F	9F Integrated Digital Avionics	4	9,189		653	-653	a
128 0604220F	OF Ew Counter Response	4	30,499		2,634	-2,634	b
129 0604222F	2F Nuclear Weapons Support		4,224	4,427	2,179	2,	2,177 U
130 0604223F	F Alternate Fighter Engine	4	102,171	76,616	28.078	46-	28 062 11

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Department of the Air Force FY 1989 R D T & E Program

Exhibit R-1

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Test & Eval	
: 3600 F Research Development	
3600 F Resear	
Appropriations	***************************************

Number Tream Nomenclature Act FF 1987 FF 1988 PRES BINDERS FF 1989 FF					************			*************	
Decolaries Properties Pro				i					
Number Team Nomenclature Act FY 1989 TAT 1989 Act TAT 1989	Lin						FY 88/89		
0604232F C-17 Program	2		Item Nomenclature	Act	FY 1987	FY 1988	FY 1989	ADJUSTMENT	FY 1989
0604232F Fanker, Transport, Bomber Training System 4 4,500 4,600	131		C-17 Program	4	615,716	1,115,550	981,977	-20,910	
0604235F Tanker, Transport, Bomber Training System 4 4.500 4,500 4,500 4,500 4,607 4,608	132		PAVE RUNNER	4					
0604236F Infrared Search and Track System 4 24,303 14,000 4,876 -4 4,975 0604237F Airable Stability In-Flight Simulator Test 4 5,816 6,225 14,380 -2,511 11,669 0604237F Airable Stability In-Flight Simulator Test 4 19,159 14,942 16,302 -2,511 11,669 0604247F Advanced Tactical Aircraft (ATA) 4 18,159 14,942 16,302 -3,013 13,289 0604247F Hodular Automatic Test Equipment 4 37,942 19,774 4,689 -3,013 13,289 0604236F Night/Precision Attack 4 37,942 19,774 4,689 -3,013 13,289 0604236F Night/Precision Attack 4 37,942 19,774 4,689 -3,013 13,289 0604236F Aircraft Engine Component Tepgram 4 110,278 90,658 128,737 -34,227 94,510 0604318F Advanced Hedium-Range, Air-to-Air Missile (ARRAM) 4 24,636 1,494 <td< td=""><td>133</td><td></td><td>Tanker, Transport, Bomber Training System</td><td>4</td><td></td><td></td><td></td><td>4,500</td><td>4,500 U</td></td<>	133		Tanker, Transport, Bomber Training System	4				4,500	4,500 U
0604237F Variable Stability In-Pilght Simulator Test 4 5,816 6,225 14,380 -2,511 11,669 0604247F Consolidated EW Program 4 18,159 14,942 16,302 -3,013 13,289 0604248F Advanced Tactical Aircraft (ATA) 4 18,159 14,942 16,302 -3,013 13,289 0604248F Modular Automatic Test Equipment 4 37,942 19,774 4,689 -5 -39,255 -39,255 0604250F Integrated EW/CMI Development 4 37,942 19,774 4,689 -5 -5 4,684 0604250F Integrated EM/CMI Development 4 110,278 90,658 128,737 -34,227 94,510 0604210F Aircraft Engline Component Improvement Program 4 531 127,178 127,178 0604310F Aircraft Engline Component Improvement Program 4 531 127,178 127,178 0604310F Advanced Medium-Range, Air-to-Air Missille (ARRAM) 4 24,636 14,946 5,405 -5,40	134		Infrared Search and Track System	*	24,303	14,000	4,876	4	4,872 U
0604241F Consolidated EW Program 4 19,043 13,289 0604242F Advanced Tactical Aircraft (ATA) 4 18,159 14,942 16,302 -3,013 13,289 0604248F Modular Automatic Test Equipment 4 37,942 19,774 4,689 -5 4,684 0604250F Night/Precision Attack 4 37,942 19,774 4,689 -5 4,684 0604250F Integrated EW/CNI Development 4 37,942 19,774 4,689 -5 32,214 88,295 0604250F Integrated EW/CNI Development 4 110,278 90,658 128,737 -34,227 94,510 0604313F Advanced Hedium-Range, Air-to-Air Missile (ASRAAM) 4 36,726 23,906 9,576 -5,405 4,171 0604313F Advanced Short Range Air-to-Air Missile (ASRAAM) 4 24,636 9,576 -5,405 4,171 0604327F Joint Tactical Fusion Program 4 24,636 1,494 14,085 -7,806 6,279 060	135	0604237F			5,816	6,225	14,380	-2,511	11,869 U
0604242F Advanced Tactical Aircraft (ATA) 4 18,159 14,942 16,302 -3,013 13,289 0604247F Modular Automatic Test Equipment 4 18,159 14,942 16,302 -39,255 -39,255 -4,684 0604248F Modular Standoff Weapons 4 37,942 19,774 4,689 -5 4,684 -6 4,684 -6 4,684 -6 4,684 -6 4,684 -6 4,684 -6 -39,255 -4,684 -6 6 6,084 -6 -6 -6 6,684 -6 -6 -6 4,684 -6 -6 -6 -6 4,684 -6 -6 -6 -6 -6 4,684 -6	136	0604241F	Consolidated EW Program	4		179,043			ב
0604247F Modular Automatic Test Equipment 4 18,159 14,942 16,302 -39,255 0604248F Modular Standoff Weapons 4 37,942 19,774 4,689 -39,255 0604249F Night/Precision Attack 4 37,942 19,774 4,689 -5 0604250F Integrated EW/CNI Development 4 110,278 90,658 128,737 -34,227 0604250F Aircraft Engine Component Improvement Program 4 110,278 90,658 128,737 -34,227 0604313F Advanced Medium-Range, Air-to-Air Missile (ASRAAM) 4 36,726 23,906 9,576 -5,405 0604321F Advanced Short Range Air-to-Air Missile (ASRAAM) 4 24,636 13,802 -5,405 0604327F Hardened Target Munitions 4 24,636 1,494 14,085 -7,806 0604327F Hardened Target Munitions 4 24,636 1,494 14,085 -7,806 0604327F Ground-Launched Cruise Missile (GCM) 4 24,636 1,494	137	0604242F	Advanced Tactical Aircraft (ATA)	4					
0604249F Hodular Standoff Weapons 4 37,942 19,774 4,689 -39,255 -39,255 -39,255 -39,255 -39,255 -39,255 -39,255 -39,255 -39,255 -39,255 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5 -2 -5 -5 -2 -5 -39,255 -39,255 -34,227 -34,627 -34,627 -34,627 -34,627 -34,627 -34,627 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65 -54,65	138	0604247F	Modular Automatic Test Equipment	4	18,159	14,942	16,302	-3,013	13,289 U
0604250F Night/Precision Attack 4 37,942 19,774 4,689 -5 4,684 0604250F Integrated EW/CNI Development 4 7,684 36,081 52,214 88,295 0604250F Aircraft Engine Component Improvement Program 4 110,278 90,658 128,737 -34,227 94,510 0604213F EW Development 4 531 127,178 127,178 0604313F Advanced Medium-Range, Air-to-Air Missile (ASRAAM) 4 36,726 23,906 9,576 -5,405 4,171 0604312F Joint Tactical Pusion Program 4 24,636 13,802 -5,405 4,171 0604327F Hardened Target Munitions 4 24,636 14,996 -5,405 6,279 0604327F Hardened Target Munitions 4 24,636 1,494 14,085 -7,806 6,279 0604327F Hardened Target Munitions 4 24,636 1,494 14,086 -5,88	139	0604248F	Modular Standoff Weapons	4			39,255	-39,255	Ð
0604250F Integrated EW/CNI Development 4 7,684 36,081 52,214 88,295 0604268F Aircraft Engine Component Improvement Program 4 110,278 90,658 128,737 -34,227 94,510 0604270F EW Development 4 110,278 90,658 128,737 -34,227 94,510 0604313F T-46A 4 531 23,906 9,576 -5,405 4,171 0604315F Advanced Short Range Air-to-Air Missile (ASRAM) 4 24,636 13,802 -5,405 4,171 0604327F Hardened Target Munitions 4 24,636 1,494 14,085 -7,806 6,279 0604327F Ground-Launched Cruise Missile (GLCH) 4 1,494 1,498 -7,806 6,279	140	0604249F	Night/Precision Attack	4	37,942	19,774	4,689	5	4,684 U
0604268F Aircraft Engine Component Improvement Program 4 110,278 90,658 128,737 -34,227 94,510 0604313F FW Development 4 531 127,178 127,178 127,178 127,178 0604313F T-46A Advanced Medium-Range, Air-to-Air Missile (ASRAAM) 4 36,726 23,906 9,576 -5,405 4,171 0604315F Advanced Short Range Air-to-Air Missile (ASRAAM) 4 24,636 9,576 -5,405 4,171 0604327F Hardened Target Munitions 4 24,636 13,802 -7,806 6,279 0604327F Ground-Launched Cruise Missile (GLCH) 4 1,494 14,085 -7,806 6,279	141	0604250F	Integrated EW/CNI Development	4		7,684	36,081	52,214	
0604270F EW Development 4 531 127,178 4,171	142	0604268F		4	110,278	90,658	128,737	-34,227	
0604313F T-46A 4 531 0604314F Advanced Medium-Range, Air-to-Air Missile (ASRAAM) 4 36,726 23,906 0604315F Advanced Short Range Air-to-Air Missile (ASRAAM) 4 24,636 9,576 -5,405 4,171 0604321F Joint Tactical Fusion Program 4 24,636 13,802 -7,806 6,279 0604327F Hardened Target Munitions 4 1,494 14,085 -7,806 6,279 0604362F Ground-Launched Cruise Missile (GLCM) 4 958 -958	143	0604270F	EW Development	4				127,178	127,178 U
0604314F Advanced Medium-Range, Air-to-Air Missile (ARRAAM) 4 36,726 23,906 9,576 -5,405 4,171 0604315F Advanced Short Range Air-to-Air Missile (Assistance) 4 24,636 13,802 -5,405 4,171 0604327F Hardened Target Munitions 4 24,636 1,494 14,085 -7,806 6,279 0604362F Ground-Launched Cruise Missile (GLCM) 4 958 -958	144	0604313F	T-46A	•	531				ב
0604315F Advanced Short Range Air-to-Air Missile (ASRAAM) 4 24,636 9,576 -5,405 4,171 0604321F Joint Tactical Fusion Program 4 24,636 13,802 0604327F Hardened Target Munitions 4 1,494 14,085 -7,806 6,279 0604362F Ground-Launched Cruise Missile (GLCM) 4 958 -958	145	0604314F	Advanced Medium-Range, Air-to-Air Hissile (AMRAAM)	4	36,726	23,906			
0604321F Joint Tactical Fusion Program 4 24,636 13,802 0604327F Hardened Target Munitions 4 1,494 14,085 -7,806 6,279 0604362F Ground-Launched Cruise Missile (GLCM) 4 958 -958	46	0604315F	•	4		966	9,576	-5,405	
0604327F Hardened Target Munitions 4 1,494 14,085 -7,806 0604362F Ground-Launched Cruise Missile (GLCM) 4 958 -958	47	0604321F	Joint Tactical Fusion Program	4	24,636	13,802			
0604362F Ground-Launched Cruise Missile (GLCH) 4 -958	148	0604327F	Hardened Target Munitions	4		1,494	14,085	-7,806	6,279 U
	49	0604362F	Ground-Launched Cruise Missile (GLCM)	4			928	-958	D

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Department of the Air Force FY 1989 R D T & E Program

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Appropriation: 3600 F Research Development Test & Eval AF

AMENDED e 17,661 U 19,158 U 7,326 U 26,752 U 17,018 U U 760,8 1,635 U 16,914 U 6,044 U 5,144 U 107,196 U 39,787 U 13,156 U Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT -18 -17 -16 -2,006 -602 -704 -7 13,474 1,184 -20311,650 -8,915 -20,403 -8,047 -81,974 -8,511 .55,994 FY 88/89 PRES BUDGET FY 1989 17,678 19,176 7,333 13,278 8,103 17,034 2,237 15,730 6,748 203 5,148 8,915 28,137 127,599 8,047 81,974 55,994 21,667 FY 1988 4,650 14,543 13,800 11,953 6,704 1,639 12,568 7,635 22,520 194 11,288 34,864 9,961 32,738 196'6 4,712 FY 1987 21,653 6,874 19,582 23,328 9,212 16,324 14,702 12,947 19,043 8,848 23,729 27,268 57,714 14,261 16,464 11,967 40,200 Act - Exterior Computer Resources Management Technology Chemical/Biological Defense Equipment Common Support Equipment Development DoD Physical Security Equipment Precision Location Strike System Wide-Area, Anti-Armor Hunitions Aeromedical Systems Development Airborne Self-Protection Jammer Armament/Ordnance Development Combat Identification Systems Other Operational Equipment Tactical C3 Countermeasures Surface Defense Suppression Tactical Protective Systems Item Nomenclature Reconnaissance Equipment Air Base Operability Life Support Systems Protective Systems Submunitions 0604601F 0604602F 0604604F 0604607F 0604617F 0604703F 0604704F 0604706F 0604708F 0604710F 0604715F 0604724F 0604725F 0604733F 0604737F 0604738F 0604739F 0604740F Program Line Element 0604742F Number 150 151

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Department of the Air Force FY 1989 R D T & B Program

Appropriation: 3600 F Research Development Test & Eval AF

Date: February 1988 Exhibit R-1

•							Thousands of Dollars	Dollars
Line	Program a Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED 6 FY 1989 C
169	0604750F	Intelligence Equipment		12,162	5,905	4,880	Ģ	4,875 U
170	0604754F	Joint Tactical Information Distribution System	4		21,914	64,772	-62	64,710 U
111	0604756F	Side Looking Airborne Radar	4	21,904		5,254	-1,604	3,650 U
172	0604770F	Joint Surveillance/Target Attack Radar System	4	297,248	346,559	238,296	-226	238,070 U
173	0604779F 0101133F	Joint Interoperability of Tactical Command & Control Systems (JINTACCS) SR-71 Squadrons	ન વ	9,331	6,017	6,085	9	n 6/0/9
175	0201131F	U.S. Readiness Command ~ Communications	· `~		3,999	1,276	-1,276	
176	0207129F	F-111 Squadrons	•	15,790	18,926	20,136	1,405	21,541 U
111	0207130F	F-15A/B/C/D Squadrons	4	153,347	105,588	69,340	19,716	99,056 U
178	0207133F	F-16 Squadrons	4	53,651	25,401	23,640	2,821	26,461 U
179	0207136F	P-4G WILD WEASEL Squadrons	•	25,812	15,739	17,001	4,286	21,287 U
180	0207137F	CONSTANT HELP	4					
181	0207139F	Competitive Fighter Procurement	4			2,846	-2,846	ם
182	0207162F	Tactical AGM Hissiles	4	1,457	2,339			n
183	0207168F	P-111 Self Protection Systems	4		19,125	52,869	-52,869	ם
184	0207169F	SEEK CLOCK	÷					
185	0207215F	TR-1 Squadron	. 4	20,453	69,728	102,307	66-	102,208 U
981	0207217F	Follow-On Tactical Reconnaissance System	4	17,672	42,833	54,084	2,478	56,562 U
181	0207247F	AF TENCAP	4	2,859	312	324	1-	323 U

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Appropriation: 3600 F Research Development Test & Eval AF

Department of the Air Force FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1

			į				Thousands of Dollars	Dollars
Line	Frogram e Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
188	0207316F	TACIT RAINBOW	4		000			
189	02074118				19,150	48,360	-9,037	39,323 U
		Oversees Air Weapon Control System	4	6,305	6,920	6,075	9-	п 690'9
190		Tactical Air Control Systems	4	15,546	17,930	14,370	-1,014	13.356 11
191	0207417F	Airborne Warning and Control System (AWACS)	4	99,092	94,630	88,419	86.355	
192	0207423F	Advanced Communications Systems	4	29,900	29,883	11.089	-283	0 5///5/7
193	0207424F	Copper Coast	4					0 000 104
194	0207431F	Tactical Air Intelligence System Activities		1,321	1.943			:
195	0207433F	Tactical Improvement Program	4					
961	0207435F	Tactical Reconnaissance Imagery and Exploitation	4	. 803	1,138	1.534	51	
197	0207579F	Advanced Systems Improvements	4				7	1,532 U
198	0207582F	Have Trump	4					
199	0207584F	SEEK AXLE	4					
200	0207585F	SEEK SPINNER	. 4		•			
201	0207591F	OMEGA	₩					
202	0207595F	Base Communications - Tactical Air Forces	. 4	3,586				
203	0208010F	Joint Tactical Communications Program (TRI-TAC)	4	6.975	190 0			
204	0208042F		4		TOCIC	8,102	-3,804	4,298 U
205	030360SF	Satellite Communications Terminals	· 4	4,461	13.946	22.760	336 V-	
206	0305165F	NAVSTAR Global Positioning System (Space and Control Segments)	4	3,100			00/	U 466'/T

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Department of the Air Force FY 1989 R D T & E Program

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Appı	ropriation	Appropriation: 3600 F Research Development Test & Eval AF					Date: Fe	Date: February 1988
							Thousands of Dollars	f Dollars
Line	Program Blement Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED e FY 1989 C
207	0305887F	Blectronic Combat Intelligence Support	•	1,691		1,682	-1,682	
208	0401129F	THEME CASTLE	4					
209	0401316F	Senior Citizen	4					
210	0401840F	MAC Command and Control System	4	11,594	696'L	11,015	-2,000	9,015 U
211	0404011F	Special Operations Forces	4	63,277		113,461	-113,461	n
212	0502610F	A-7 Squadrons (ANG)	4	37,318	596,65	83,367	-79	83,288 U
213	3110011F	Force Enhancements-Active	4		116,837		155,263	155,263 U
	Tactical	Tactical Programs		3,631,177	4,031,360	4,210,694	55,158	4,265,852
214	0603431F	Space Communications	រភ	13,690				D
215	0604238F	Constant Pisces	S					
216	0301305F	Intelligence Production Activities	S					
217	0301310F	Foreign Technology Division	S					
218	0301314F	Infrared/Electro-Optical/Dir. Energy Weapons	ĸ					
219	0301315F	Frocessing and Exploitation Hissile and Space Technical Collection	ເດ					
220	0301317F	SENIOR YEAR Operations	ĸ					•
221	0301324F	FOREST GREEN	S			,		
222	0301357F	NUDET Detection System	ĸ					
223	0302053F	NMCS-Wide Support - Communications	ທ	196				5
224	0303110F	Defense Satellite Communications System	in	16,833	43,325	53,596	-15,535	38,061 U

Exhibit R-1

Department of the Air Force FY 1989 R D T & E Program

Appropriation: 3600 F Research Development Test & Eval AF

Programme Prog			į				Thousands of Dollars	f Dollars
Inter-Service/Agency Automated Hessage Processing 5 1,883 5,132 4,756 -5 Inter-Service/Agency Automated Hessage Processing 5 1,883 1,289 13,240 -13,240 Exectromagnetic Commatibility Analysis Center 5 7,485 8,083 8,688		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1969 ADJUSTMENT	AHENDED FY 1989
0.003126F The E-Service / Agency Automated Hessage Processing 5 7,485 8,083 1,289 13,240 -13,240 -19,240 0.003126F Exchange action Compatibility Analysis Center 5 7,485 8,083 8,618 -19,180 -19,180 0.003401F Communications Security (COMSEC) 5 7,485 8,083 8,618 -19,180 -19,180 0.003401F Special Activities 5 21,407 25,891 25,139 -25 -25 0.00314F Traffic Control, Approach, and Landing System (User Equipment) 5 21,407 25,891 25,139 -25 -25 0.003516F Traffic Control, Approach, and Landing System (User Equipment) 5 2,293,434 2,132,074 2,024,634 -6,025 -6		Long-Haul Communications (DCS)	ĸ	7,053	5,132	4.756	'n	4,751
0.003144F Electromagnetic Compatibility Analysis Center 0.003144F Communications Security (COMSEC) 5 7,485 8,083 8,618 -191 0.0030114F Communications Security (COMSEC) 5 21,407 25,891 25,139 -25 0.00305154F Traffic Control, Approach, and Landing System 5 21,407 26,204 61,257 -8,025 0.00305154F NAVSTAR Global Positioning System (Space and Control Segments) 6 2,293,434 2,132,074 2,024,634 -5,025 0.00505157 NAVSTAR Global Positioning System (Space and Control Segments) 6 4,424 2,132,074 2,024,634 -5,025 0.00503402F Space Test Program 6 36,486 3,264 3,787 -3 0.0035157 NAVSTAR Global Positioning System (Space and Communications Statements) 6 1,886 3,264 3,787 -3 0.00503402F Space Test Program 6 36,486 3,264 3,787 -3 0.003402F Space Test Program 6 36,486 3,264 3,787 -3 0.003402F Space Test Program 6 36,486 3,264 3,787 -3 0.003402F Statement Development 6 1,886 3,264 3,787 -3 0.003402F Statement Systems - Eng Dev 6 12,170 12,488 11,769 -3,008 0.003402F Statement - Eng Dev 6 12,170 12,488 11,769 -3,008 0.003402F Statement - Eng Dev 6 12,170 12,488 11,769 -4,519 -3,008 0.003402F Statement - Eng Dev 6 12,170 12,488 11,769 -4,519		-	ហ	51,883	1,289	13,240	-13,240	
0303401F Communications Security (COMSEC) 5 1,407 25,891 25,139 -25 1,005 1,605 1,607 1,547 1,547 1,005 1,607 1,607 1,607 1,607 1,607 1,607 1,005 1,007 1,		•	S	7,485	8,083	8,618	-191	8.427
0.305114F Traffic Control, Approach, and Landing System 5 21,407 25,891 25,139 -25 0.3051159F Traffic Control, Approach, and Landing System 5 21,407 26,891 25,139 -25 0.305159F Avivorate Gupport Activities 5 32,817 26,204 61,697 -11,547 0.305158F Avivorate Gupport Activities 5 32,817 26,204 61,257 -9,025 0.305158F Avivorate Gupport Activities 5 32,817 26,204 61,257 -9,025 0.305158F Avivorate Gupport Activities 5 4,424 -2,132,074 2,024,634 -57,868 0.305158F Avivorate Activities Systems Survivability 6 1,886 3,264 3,787 -3 0.305158F Satellite Systems Survivability 6 10,671 9,848 3,714 -3 0.604278F Flight Simulator Development 6 22,783 56,778 64,467 8,333 0.604707F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -3,008 0.604735F Range Improvement 6 58,965 55,782 46,603 -6,538 4,653 -6,538 4,653 -6,538		Communications Security (COMSEC)	S	, I				
0.305114F Traffic Control, Approach, and Landing System 5 21,407 25,891 25,139 -25		Special Activities	S					
0.305159F Defense Recommaissance Support Activities 5 28,172 40,239 61,697 -11,547 0.305164F NAVGTAR Global Positioning System (User Equipment) 5 32,817 26,204 61,257 -8,025 0.305165F NAVGTAR Global Positioning System (Space and Control Segments) 2,293,434 2,132,074 2,024,634 863 2,00 Intelligence and Communications			ഗ	21,407	25,891	25,139	-25	25,114 U
0.305164F NAVSTAR Global Positioning System (User Equipment) 5 28,172 40,239 61,697 -11,547			S.					
0305165F NAVSTAR Global Positioning System (Space and Control Segments) 0.001505F Control Segments			· ທ	28,172	40,239	61,697	-11,547	50,150 U
Intelligence and Communications 2,293,434 2,132,074 2,024,634 963 2.0 Intelligence and Communications 2,293,434 2,132,074 2,024,634 963 2.0 Intelligence and Communications 6 49,093 53,887 130,664 -57,868 Intelligence and Communications 6 1,886 3,264 3,787 -3 Intelligence and Communications 6 10,671 9,848 3,714 -3 Intelligence and Communications 6 10,671 9,848 3,714 -3 Intelligence and Communications 6 12,170 12,488 11,769 -3,008 Intelligence and Communications 6 12,170 12,488 11,769 -3,008 Intelligence and Communications 6 12,170 12,488 11,769 -4,538 Intelligence and Communications 6 12,170 12,488 11,769 -6,538 Intelligence and Communications 6 26,782 46,603 -6,538 Intelligence and Communications 6 26,782 26,279 -6,538 Intelligence and Communications 6 26,782 26,279 Intelligenc			ĸ	32,817	26,204	61,257	-8,025	53,232
Intelligence and Communications 2,293,434 2,132,074 2,024,634 863 2,00 0603402F Space Test Program 6 1,886 3,264 3,787 -3 0603438F Satellite Systems Burvivability 6 1,886 3,264 3,787 -3 0603438F Satellite Systems Burvivability 6 1,886 3,264 3,787 -3 0603438F Satellite Systems Burvivability 6 36,488 3,787 -3 0604227F NATO Research and Development 6 10,671 9,848 3,714 -3 0604227F Flight Simulator Development 6 92,783 56,778 64,467 8,333 0604207F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -5,519 0604707F Range Improvement 6 58,785 55,782 46,603 -6,538		General Intelligence Skill Training	ĸ	4,424				
0603402F Space Test Program 6 49,093 53,887 130,664 -57,868 0603438F Satellite Systems Burvivability 6 1,886 3,264 3,787 -3 0603790F NATO Research and Development 6 10,671 9,848 3,714 -3 0604211F Advanced Aerial Target Development 6 92,783 56,776 64,467 8,333 0604227F Flight Simulator Development 6 92,783 56,776 64,467 8,333 0604609F R&M Maturation/Technology Insertion 6 12,170 12,488 11,769 -5,519 0604707F Weather Systems - Eng Dev 6 58,965 55,782 46,603 -6,538	Intellige	nce and Communications		2,293,434	2,132,074	2,024,634	863	2.025.497
0603438F Satellite Systems Burvivability 6 1,886 3,264 3,787 -3 0603790F NATO Research and Development 6 10,671 9,848 3,714 -3 0604211F Advanced Aerial Target Development 6 10,671 9,848 3,714 -3 0604227F Flight Simulator Development 6 92,783 56,778 64,467 8,333 0604227F RAM Maturation/Tachnology Insertion 6 12,170 12,488 11,769 -5,519 0604737F Range Improvement 6 58,965 55,782 46,603 -6,538		Space Test Program	9	49,093	53,887	130,664	-57.868	11 797.27
0604211F Advanced Aerial Target Development 6 10,671 9,848 3,714 -3 0604211F Advanced Aerial Target Development 6 10,671 9,848 3,714 -3 0604227F Flight Simulator Development 6 92,783 56,778 64,467 8,333 0604609F R&M Maturation/Technology Insertion 6 12,170 12,488 11,769 -5,519 0604707F Weather Systems - Eng Dev 6 58,965 55,782 46,603 -6,538		Satellite Systems Survivability	9	1,886	3,264	3,787	e i	
0604211F Advanced Aerial Target Development 6 10,671 9,848 3,714 -3 0604227F Flight Simulator Development 6 92,783 56,778 64,467 8,333 0604609F R&M Maturation/Technology Insertion 6 13,821 14,942 26,279 -5,519 0604707F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -3,008 0604735F Range Improvement 6 58,965 55,782 46,603 -6,538		NATO Research and Development	9	36,488				
0604227F Flight Simulator Development 6 92,783 56,778 64,467 8,333 0604609F R&M Maturation/Tachnology Insertion 6 13,821 14,942 26,279 -5,519 0604707F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -3,008 0604735F Range Improvement 6 58,965 55,782 46,603 -6,538		Advanced Aerial Target Development	. 9	10,671	9,848	3,714		3,711 8
0604707F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -5,519 0604735F Range Improvement 6 58,965 55,782 46,603 -6,538		Flight Simulator Development		92,783	56,778	64,467	8,333	72,800 U
0604707F Weather Systems - Eng Dev 6 12,170 12,488 11,769 -3,008 0604735F Range Improvement 6 58,965 55,782 46,603 -6,538		REW Maturation/Technology Insertion	y	13,821	14,942	26,279	-5,519	20,760 U
0604735F Range Improvement 6 58,965 55,782 46,603 -6,538		- Eng	9	12,170	12,488	11,769	-3,008	8,761 U
		Range Improvement	. 9	596'85	55,782	46,603	-6,538	40,065 U

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Exhibit R-1

Department of the Air Force FY 1989 R D T & E Program

Statement Transmister Tr	0	Appropriation:	: Soud & Research Development Test & Byal AF					Date: Fe	Date: February 1988
Decomposition Tream Nomenciature Act FF 1987 FF 1989 FF 1989 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Thousands of</th> <th>f Dollars</th>								Thousands of	f Dollars
0604747F Electromagnaetic Radiation Teat Pacilities 6 5.399 5.919 6.238 -1.005 5.708 06047557 Electromagnaetic Radiation Teat Pacilities 6 76,727 52,295 71,257 -20,549 50,708 060501017 Project Air Force 6 20,299 22,020 20,011 1,981 21,992 06053047 Ranch Hand II Epidemiology Study 6 7,147 5,754 1,757 -10 1,747 06053048 Ranch Hand II Epidemiology Study 6 7,147 5,754 1,757 -10 1,747 06053057 Ranch Hand II Epidemiology Study 6 73,404 1,757 -10 1,747 06053068 Acquistion and Command Support 6 25,293 24,122 24,959 -4,414 20,545 06058078 Ranch Hand II Epidemiology Study 6 25,293 24,122 24,959 -4,414 14,431 06058079 Advanced Systems Engineering/Planning 6 2,200 50,000 60,862 -3,036 -3,036 06058079 Ranch Hand II Epidemiology Study 6 2,201 -3,036 -3,036 -3,036 -3,036 06058079 Advanced Systems Engineering/Planning 6 2,000 50,000 60,862 -3,036 -3,036 06058079 Ranch Hand II Epidemiology Study 6 2,000 50,000 50,000 -3,036 -3,036 06058079 Advanced Systems Engineering/Planning 6 2,000 50,000 50,000 -3,036 -3,036 06058079 Ranch Hand II Epidemiology Study 6 2,000 50,000 50,000 -3,036 -3,036 06058079 Advanced Systems Engineering/Planning 6 2,000 50,000 50,000 -3,036 -3,036 06058079 Ranch Hand Ranch Canter 6 2,000 50,000 50,000 -3,036 -3,036 -3,036 06058079 Ranch Hand Ranch Canter 6 2,000 50,000 50,000 -3,036 -3,036 -3,036 06058079 Ranch Hand Ranch Canter 6 2,000 -3,036 -3,	No.		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
0605101P Project Appability for Development Test 6 76,727 52,296 71,257 -20,549 50,708 0605101P Project Air Force 6 20,299 22,020 20,011 1,981 21,992 06050304F Acquisition a Command Support (ACS) - 6 12,727 5,754 1,757 -10 1,741 0605502F Small Business Innovative Research 6 73,404 5,754 1,757 -10 1,741 0605502F Small Business Innovative Research 6 25,793 24,122 24,959 -4,414 20,545 0605080F Advanced Systems Engineering/Planning 6 12,637 13,093 27,445 -13,014 14,431 0605808F Advanced Systems Engineering/Planning 6 12,637 13,093 27,445 -13,014 14,431 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 2,871 30,000 60,862 -3,036 57,026 0605808F Advanced Systems Engineering/Planning 6 24,019 50,000 50,000 50,000 50,000 50,000 0605808F Advanced Systems Engineering/Planning 6 24,019 50,000 50,000 50,000 50,000 50,000 0605808F Advanced Systems Engineering/Planning 6 24,019 50,000 50,000 50,000 50,000 50,000 0605808F Advanced Systems Engineering/Planning 6 24,019 50,000 50,000 50,000 50,000 50,000 0605808F Advanced Systems Engineering/Planning 6 24,019 50,000 5	243		Electromagnetic Radiation Test Facilities	9	5,399	5,919	6,238	-1,005	5,233 U
0605101P Project Air Porce 6 20,299 22,020 20,011 1,981 0605304P Acquisition a Command Support (AcS) 6 12,727 5,754 1,757 -10 0605304P Acquisition a Command Support (AcS) 6 73,404 5,754 1,757 -10 0605304P Acquisition and Command Support 6 73,404 5,754 1,757 -10 0605306P Acquisition and Command Support 6 26,293 24,122 24,959 -4,414 0605806P Acquisition and Command Support 6 302,302 295,106 316,669 -13,014 13,014 0605807P Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 13,014 0605807P Product Vity Investments 6 2,871 6,200 50,000 60,862 -3,036 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,038 1,039 1,038 1,038 1,038 1,039<	244		4	.9	76,727	52,296	71,257	-20,549	50,708 U
6605304F Acquisition a Command Support (ACS) - 6 6 12,727 -10 0605306F Ranch Indicate Long Acquisition and Command Support (ACS) - 6 7,147 5,754 1,757 -10 0605306F Ranch Indicate Long Acquisition and Command Support 6 294,296 24,122 24,959 -4,414 0605306F Ranch Indicate Since Acquisition and Command Support 6 294,296 302,302 295,106 316,669 -18,582 24,414 0605807F Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 33 0605807F Test and Evaluation Support 6 2,600 50,000 60,862 -13,014 33 0605807F PYCOMS Coccessor 6 2,871 9,224 -3,336 32 0605807F Productivity Investments 6 2,871 6 2,871 1,038 6 0605807F Product Performance Agreement Center 6 2,871 6 1,4465 80,843 1,038 6 0605807F <td>245</td> <td></td> <td>Project Air Force</td> <td>9</td> <td>20,299</td> <td>22,020</td> <td>20,011</td> <td>1,981</td> <td>21,992</td>	245		Project Air Force	9	20,299	22,020	20,011	1,981	21,992
0605306F Ranch Hand II Epidemiology Study 6 7,147 5,754 1,757 -10 0605302F Small Business Innovative Research 6 73,404 6 73,404 -4,414 2 0605708F Navigation/Radar/Sled Track Test Support 6 294,296 24,122 24,959 -4,414 2 0605807F Acquistion and Command Support 6 302,302 295,106 316,669 -18,582 29 0605807F Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 1 0605807F Avanced Systems Engineering/Planning 6 2,871 9,224 -13,014 1 0605807F Productivity Investments 6 2,871 9,224 -3,036 5 0605807F Product Performance Agreement Center 6 2,871 6 39,425 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406 56,406	246			9	12,727				
0605502F Small Business Innovative Research 6 73,404 24,122 24,959 -4,414 2 0605708F Navigation/Radar/Sled Track Test Support 6 294,296 316,669 -18,582 29 0605807F Acquisition and Command Support 6 12,637 13,093 27,445 -18,582 29 0605807F Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 1 0605807F Advanced Systems Engineering/Planning 6 6,000 50,000 50,862 -3,036 5,036 0605807F Productivity Investments 6 2,871 9,224 -3,036 5 0605807F Product Performance Agreement Center 6 2,871 74,415 90,862 -3,036 5 0605807F Product Performance Agreement Center 6 99,422 56,000 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 56,106 <	247		Ranch Hand II Epidemiology Study	9	7,147	5,754	1,757	-10	1,747 U
0605708F Advanced Systems Engineering/Planning 6 25,293 24,122 24,959 -4,414 20,546 060580F Acquisition and Command Support 6 294,296 302,302 295,106 316,669 -18,582 298,087 060580F Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 14,431 060580F Advanced Systems Engineering/Planning 6 12,637 13,093 27,445 -13,014 14,431 060580F Advanced Systems Engineering/Planning 6 2,871 9,224 -13,014 14,431 060580F Productivity Investments 6 2,871 9,244 -13,014 1,038 9,191 060580F Product Performance Agreement Center 6 2,871 4,465 80,843 1,038 81,881 060580F Product Performance Agreement Center 6 124,019 74,465 80,843 1,038 81,881 060580F Base Operations - RDTE 6 75,913 95,458 25,946	248	0605502F	Small Business Innovative Research	9	73,404				D
605806F Acquisition and Command Support 6 294,296 0605807F Test and Evaluation Support 6 302,302 295,106 316,669 -18,582 298,087 0605807F Test and Evaluation Support 6 12,637 13,093 27,445 -13,014 14,431 0605807F DYCONB 7,471 9,224 -33 9,191 0605807F RDTER Aircraft Support 6 62,000 50,000 60,862 -3,036 57,826 0605807F Product Veriformance Agreement Center 6 2,871 74,465 80,843 1,038 81,881 0605897F Product Performance - RDTER 6 124,019 74,465 80,843 1,038 81,881 0605897F Rase Operations - RDTER 6 124,019 74,465 56,146 5,397 61,543 0605897F Base Operations - RDTER 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865	249		Navigation/Radar/Sled Track Test Support	9	25,293	24,122	24,959	-4,414	20,545 U
0605807F Test and Evaluation Support 6 302,302 295,106 316,669 -18,582 298,087 0605807F Advanced Systems Engineering/Planning 6 12,637 13,093 27,445 -13,014 14,431 0605803F DYCOMB 6 2,871 7,471 9,224 -3,036 9,191 0605803F PYCOMC Factormance Agreement Center 6 2,871 -3,036 60,862 -3,036 57,826 0605894F Product Performance - RDYEB 6 124,019 74,465 80,843 1,038 91,881 0605894F Base Operations - RDYEB 6 99,422 56,809 56,146 5,397 61,543 0605894F Base Operations - RDYEB 6 75,913 95,458 126,898 -26,095 100,803 0605894F Base Operations - RDYEB 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865 15,817 472,938 488,785	0	0605806F	Acquisition and Command Support	9	294,296				
0605808F Advanced Systems Engineering/Planning 6 12,637 13,093 27,445 -13,014 1 0605803F DYCOMS DYCOMS 6 62,000 50,000 60,862 -3,036 5 0605803F Productivity Investments 6 2,871 -3,036 5 -3,036 5 0605804F Product Performance Agreement Center 6 124,019 74,465 80,843 1,038 8 0605894F Real Property Maintenance - RDTeE 6 99,422 56,809 56,146 5,397 6 0605896F Base Operations - RDTeE 6 75,913 95,456 126,898 -26,095 10 0305110F Space Boosters 6 75,913 95,456 15,847 472,938 48 0305110F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 4	251	0605807F	Test and Evaluation Support	ω	302,302	295,106	316,669	-18,582	298,087 U
0605803F DYCOMB 6 62,000 50,000 60,862 -33 5 0605803F Productivity Investments 6 2,871 4,465 60,862 -3,036 5 0605802F Product Performance Agreement Center 6 2,871 1,038 8 0605804F Product Performance - RDTcE 6 124,019 74,465 80,843 1,038 8 0605896F Base Operations - RDTcE 6 99,422 56,809 56,146 5,397 6 0305110F Squee Boosters 6 75,913 95,486 126,698 48 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 4	252	060580BF	Advanced Systems Engineering/Planning	9	12,637	13,093	27,445	-13,014	14,431 U
0605863F RoductIvity Investments 6 62,000 50,000 60,862 -3,036 5 0605872F ProductIvity Investments 6 2,871 4,465 80,843 1,038 8 0605874F Product Performance Agreement Center 6 124,019 74,465 80,843 1,038 8 0605894F Real Property Maintenance - RDTeB 6 99,422 56,809 56,146 5,397 6 0305110F Satellite Control Facility 6 75,913 95,458 126,898 -26,095 10 0305110F Space Boosters 6 290,552 454,865 15,847 472,938 48 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 4	253	36085090	DYCOMS	vo ·		7,471	9,224	-33	9,191 U
0605872F Productivity Investments 6 2,871 0605874F Product Performance Agreement Center 6 6 124,019 74,465 80,843 1,038 81,881 0605894F Real Property Maintenance - RDTGE 6 99,422 56,809 56,146 5,397 61,543 0605896F Base Operations - RDTGE 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085	254	0605863F	RDT68 Aircraft Support	v	62,000	50,000	60,862	-3,036	57,826 U
0605894F Product Performance Agreement Center 6 124,019 74,465 80,843 1,038 81,881 0605894F Real Property Maintenance - RDTsE 6 99,422 56,809 56,146 5,397 61,543 0605896F Base Operations - RDTsE 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085		0605872F	Productivity Investments	9	2,871			,	n
0605894F Real Property Maintenance - RDTGE 6 124,019 74,465 80,843 1,038 91,881 0605896F Base Operations - RDTGE 6 99,422 56,809 56,146 5,397 61,543 0305110F Satellite Control Facility 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085		0605874F	Product Performance Agreement Center	9	909				D
0605896F Base Operations - RDTeE 6 99,422 56,809 56,146 5,397 61,543 0305110F Satellite Control Facility 6 75,913 95,458 126,898 -26,095 100,803 0305110F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085	_	0605894F	Real Property Maintenance - RDT&E	9	124,019	74,465	80,843	1,038	81,881 U
0305110F Satellite Control Facility 6 75,913 95,458 126,898 -26,095 100,803 0305119F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085	_	39685090	Base Operations - RDT&E	9	99,422	26,809	56,146	5,397	61,543 U
0305119F Space Boosters 6 290,552 454,865 15,847 472,938 488,785 0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085	259	0305110F	Satellite Control Facility	9	75,913	95,458	126,898	-26,095	100,803 U
0305130F Consolidated Space Operations Center 6 68,559 39,864 39,126 4,959 44,085	260	0305119F	Space Boosters	9	290,552	454,865	15,847	472,938	488,785 U
		0305130F	Consolidated Space Operations Center	9	68,559	39,864	39,126	4,959	44,085 U

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Department of the Air Force FY 1989 R D T & E Program

Appropriation: 3600 F Research Development Test & Eval AF

Exhibit R-1

							Thousands of Dollars	of Dollars
	Program							2
Line	Element	Item Nomenclature	Act	FY 1987	FY 1986	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
2	262 0305160F	Defense Meteorological Satellite Program (DMSP)	.	59.556	35.5		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
263	0305171F	Space Shuttle Operations				Acc + 00	-15,175	53,364 U
	2011000		•	816'06	51,205	156,070	-97,355	58,715 U
# 0 <i>7</i>	0/01112F	Inventory Control Point Operations	9	4,628	4,329	4.480	1	
265	0702207F	Depot Maintenance (Non-IP)	9				•	0 0/5/5
266	07080111					8/6	7	973 U
		THE PROPERTY OF THE PROPERTY O	9	60,458	84,670	94.973	9 0 0	
267	0708026F	Productivity, Reliability, Availability.	4				05617	D 116'/6
968	1001001	Maintain. Prog Ofc (PRAMPO)	•	14/203	14,706	20,413	-4,015	16,398 U
		nernational Activities	•	2,721	3,107	3,156	581	3,737 U
	Defensewi	Defensewide Mission Support		2,062,594	1,604,923	1,493,170	221,938	1,715,108
183	Research	Total Research Development Test & Eval AF		15,050,523	15,165,388	17,728,571	-2,796,471	14.932.100

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Defense Agencies FY 1989 R D T & E Program

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				Thousands o	of Dollars
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	FY 1987	FY 1988	PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
Summary Recap of Research Categories					
Rosowy C					
Exploratory Development	99,903	192,050	125,367	61,195	186,562
Advanced Development	2 041 322			-113,338	783,659
Engineering Development		117.385	6,886,078	-1,241,630	5,644,448
Management and Support	131,224	158,285	181,470	-34,854	146,616
Research and Development (FYDP Program 6)	4,981,313	5.769.160	8.162.207	-1 999 666	1
Uperational Systems Development	1,786,797	1,892,665	1,957,367	-130,208	1,827,159
Total Research Develonment Test c Due 1 nos an					
TOAR B JOBS JOSEPH COMMISSION COM	6,768,110	7,661,825	10,120,664	-1,452,864	8,667,800
Technology Base					
Advanced Technology Develorment		1,070,513	1,022,364	-52,143	970.221
Strategic Programs	3,767,570	4,091,534	6,704,523	-1,559,836	5,144,687
Tactical Programs	255.597	222,833	144 010	200,374	304,602
Intelligence and Communications	1,687,707	1,728,513	1.765.184	37,240	181,252
,	174,966	415,189	380,353	46,476	426,829
fotal Research Development Test & Eval Def Ag	6,768,110	7,661,825	10,120,664	-1,452,864	8,667,800
Summary Recap of FYDP Programs					
General Purpose Forces	60,705	68,782	74.708	961.9-	
Research and Development (PVDP Drogram 6)	•	1,790,114	1,792,743	-86,191	1,704,552
Central Supply and Maintenance	4,961,313	5,769,160	8,163,297	-1,322,656	6,840,641
Support of Other Nations	1,599	10,295	89,424	-55,035	34,389
-		22,990		19,267	19,267
Total Research Development Test & Eval Def Ag	6,768,110	7,661,825	10,120,664	-1.452.864	000 633 8

	Summary			Date: F	Date: February 1988
				Thousands	Thousands of Dollars
	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
Summary Recap of Defense Agencies					
Defense Mapping Agency Strategic Defense Initiative Organ Office of Secretary/Defense Defense Advanced Research Projects Agcy National Security Agency	253,997 3,279,725 547,414 779,506	304,103 3,551,000 989,621 879,542	314,177 6,282,029 507,797 935,042	-11,056 -1,736,118 632,986 -149,196	303,121 4,545,911 1,140,783 785,846
Defense Nuclear Agency Defense Support Project Office Defense Communications Agency Defense Intelligence Agency	306,019 213,225 104,266	302,888 228,487 175,427	393,446 110,162 135,990	-46,598 26,605 48,119	346,848 136,767 184,109
Joint Tactical C3 Agency Defense Logistics Agency Uniformed Services University (USUHS)	60,058 31,983	62,020	72,598 51,641 2,832	-72,598 -7,417 -762	44,224
Total Research Development Test & Eval Def Ag	6,768,110	7,661,825	10,120,664	-1,452,864	8,667,800

Defense Agencies FY 1989 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

Line Riement		1				Thousands of	f Dollars
	Item Nomenclature	Act	FY 1967	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED 6 FY 1989 C
. 0601101E	E Defense Research Sciences	7	88,976	80,000	97,535	-8.043	80.400
2 0601101W	W In-House Laboratory Independent Research	٦.	1,897	2,442	2,832	-762	
06011030	D University Research Initiatives	7		85,000		000.26	
0601103B	B University Research Initiatives	1	9,030		25,000	-25,000	
5 0601104D	Defense Un Program	-		24,608			• •
0602101E		-		1,700	1,800		1,800 U
0602301E		1	206,987	311,500	256,400	-28,760	227,640 U
0602702E	g Tactical Technolgy	-	. 96,307	116,245	142,551	-25,680	116,871 u
0602707E		-	14,500	14,000	14,000		
10 0602708E	Integrated Command and Control Technology	7	37,873	32,000	38,400	-5,040	
0602712E	Materials and Electronics Technology	-	30,594	29,000	26,700	-6.160	20 540 11
0602714E	Nuclear Monitoring	-	19,021	24,330	22,600		מינים מינים
0602715H	Defense Nuclear Agency	-	306,019	302.888	344.596	-46 500	000477
0602716B	Mapping, Charting and Geodesy	-	830	300	001.1	965 101	240,046
0602718D	Environmental Hazard Research	-		16,500		001/1	
Technol	Technology Base		812,034	1,070,513	1.022.364		
06032200		8	922,986	955,523	1,859,530	-734,905	1,124,625 H
0603221C		8	853,131	832,326	1,245,820	-215,926	
0603222C	SDI-Kinetic Energy Weapons	~	722.493	791.549	1 100 650		

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Defense Agencies FY 1989 R D T & E Program

Appropriation: 0400 D Research Development Test & Eval Def Ag

Exhibit R-1

			i				Thousands	of Dollars
Line	Program					FY 88/89		
	Number	Item Nomenclature	Act	FY 1987	FY 1988	PRES BUDGET	FY 1989 ADJUSTMENT	AMENDED FY 1989
19	06032230	SDI-Systems Concepts and Battle Management/C3	8	385.790	503.156	013 630	2.5	
20	0603224C	SDI-Survivahility. Lathality and zer comment	•			0161101	070'/57-	639,894
		Technology	N	375,300	448,670	1,162,189	-371,775	790,414
21 (0603225D	Joint DoD-DoE Munitions Technology Development	7	7,176	14,768	8,614	-898	7,716
22 (0603226E	Experimental Evaluation of Major Innovative Technologies	8	151,774	215,133	272,246	-47,200	225,046
23 (0603227E	Relocatable Target Detection Technology Program	7		2,000	17,400	-2,000	15,400
24 0	0603269E	National Aero Space Plane Technology Program	N	100,000				
25 0	0603702D	Special Operations, Special Technology Office	N	4,015		8,836	-8.836	
26 0	0603703D	Counter-Insurgency and Special Technology	8	12,201		10,375	-10,375	
9	0603706D	Microwave/Millimeter Wave Monolithic Integrated	8	10,274	45,466	86,038	-18,974	67,064
9	0603736D	Computer Aided Logistics Support	8	13,639	9,845	12,932	-1,350	11.582
0	0603737D	Balanced Technology Initiative	8	182,314	200,000		238.000	130 000 11
0	0603738D	Cooperative DoD/VA Medical Research	. ~		15,000			
0	0603740D	RACER	~		2,000			
0	0603756D	Consolidated DoD Software Initiatives	8	24,389	24.567	30.726	706 9	
0	0305108K	Command and Control Research	8	2,088	2,541	2,657	986-	37,120 0
-	11100111	Force Enhancements-Active	~		10.827		00 00	
-	1140011D	Advanced Special Operations Research, Development and Acquisition	N		12,163		8,862	8,862 U
-	Advanced 1	Technology Development		3,767,570	4,091,534	6,704,523	-1,559,836	5.144.687
ō	0603734K	Island Sun	m	27.706	40 457	900		

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Exhibit R-1

Defense Agencies FY 1989 R D T & E Program

							Thousands of Dollars	f Dollars
Line	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
37	0603741D	Air Defense Initiative	m		49,224		213,574	213,574 U
38	0302016K	National Hilitary Command System-Wide Support	m	10,200	10,616	12,405	-6,714	5,691
39	0302019K	WWWCCS Systems Engineer	m	22,037	15,573	17,193	1,341	18,534
9	0303131K	Minimum Essential Emergency Communications Network (MEECN)	m	10,293	8,373	10,732	-947	9,785 U
	Strategic	Strategic Programs		70,236	133,243	104,228	200,374	304,602
41	0604702D	Joint Standoff Weapons Program	4		25,000		15,900	15,900 U
42	0604771D	Joint Tactical Information Distribution System	4	194,892	78,760	69,304	-7,228	62,076 U
43	0201135K	CINC C2 Initiatives	4	647	2,067	2,110	-227	1,883 U
44	0208045K	C3 Interoperability (Joint Tactical C3 Agency)	₩.		61,715		60,264	60,264 U
45	02080450	C3 Interoperability (Joint Tactical C3 Agency)	4	55,216		65,419	-65,419	
46	0208298K	Management Headquarters (Joint Tactical C3 Agency)	4		2,000		6,363	6,363 U
47 (02082980	Management Headquarters (Joint Tactical C3	4	4,842		7,179	-7,179	
48	0305141D	Joint Remotely Piloted Vehicles Program	4		50,291		34,766	34,766 U
	Tactical 1	Programs		255,597	222,833	144,012	37,240	181,252
49	0603701B	Mapping, Charting, Geodesy Investigations, and Prototype Davelonment	S.	11,400	12,168	11,347	-5,923	5,424
20	0604701B	Mapping, Charting, and Geodesy Engineering Development and Test	NO.	1,791	3,782	4,081	-2,701	1,380
21 0	0604703D	LANDSAT	ري د		9,843			Ð
52 0	0301011G	Cryptologic Activities	u					

Appropriation

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TE TOOLS	Exhibit R-1
10n: 0400 D Research Development Test & Eval Def Ag	
Date: February 1988	Date: February 1988
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	Danaga						Thousands of Dollars	f Dollars
Line	Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
53	0301301L	General Defense Intelligence Program	ហ					
54	0303126K	Long-Haul Communications (DCS)	w	26,535	16,511	22, 603	100	
55	0303127K	Support of the National Communications System	S	4.760	3.574	4 403	125.14	18,272 U
99	0303401G	Communications Security (COMSEC)	'n			704.4	4/4	3,928 U
21	0305139B	DMA Exploitation Hodernization Program	ເດ	235,829	285,000	293.317		
28	0305154I	Airborne Reconnaissance Support Program	un		87,100			718,882
59	0305159B	Defense Reconnaissance Support Activities	ហ	4,147	2,853	4.332	TRE FOR	196,86
	0305159G	Defense Reconnaissance Support Activities	ĸ				255	3,000 0
	03051591	Defense Reconnaissance Support Activities	ĸ	213,225	141,387	110.162	71 066	
	0305167G	Computer Security	ĸ					30,200
	0305884L	Intelligence Planning & Review Activities	,					
	0305885G	Tactical Cryptologic Activities	ĸ					
	Intellige	Intelligence and Communications		1,687,707	1.728.513	1 765 104		
	0603739D	Semiconductor Manufacturing Technology	٠		00 450	FOT (CO.) 1	6/6/871	1,640,209
	0603790D	NATO Research and Development		200	000	000,000	-5,215	44,785
	06051040	Marhal Canana to the state of	•	*07 *05	147,075	28,967	141,631	200,598 U
	2013030	recuircat support to USD(A)	9	15,052	17,295	29,687	-11,220	18,467 U
	Gentenen		y	2,218	2,179	4,530	-2,177	2,353 U
	0605107D	General Support for Policy	•	5,109	5,470	8,654	-2,907	5,747 U
	0605108D	General Support for Net Assessment	9	3,508	3,515	5,375	-1,563	3,812 U

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Defense Agencies FY 1989 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

Property ĺ		***************************************							
Technical Support for Pair Per 1967 Per 1967 Per 1969 Pe				i			,		of Dollars
	20		Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED 6 FY 1989 C
Second S	_	0601109D	General Support for FMGP	•	1,608	1,531	2,604	-973	1.631
	N	00011000	Technical Support to USD(A) Critical Technology	9	3,194	3,175	4,430	-462	
State Stat	m	0605112D	Rand National Defense Research Institute	9	15,373	16,259	17,452	79	
	4	0605114E	BLACK LIGHT	•	3,600	3,600	4,000	-400	
060511D Poteign Material Acquisition and Exploitation 6 9,485 9,845 13,668 -3,505 10,365 060511D General Support for PEL 6 2,483 2,558 3,422 -557 2,865 0605502E Small Business Innovative Research 6 7,851 2,133 29,019 4,400 4,400 06057113 Critical Technology Analysis 6 2,133 29,019 4,400 4,400 06058018 Defense Technical Information Centers 6 2,133 29,019 4,400 -5,620 23,824 06058028 Information Analysis Centers 6 4,579 4,483 6,997 -1,797 5,200 06058028 Information Analysis Centers 6 4,579 4,483 6,997 -1,797 5,200 06058028 Management Headquarters (Strategic Defense 6 20,025 19,776 27,330 -2,540 24,790 06058902 Infared Pocal Plane Array 6 2,535 8,326 10,800 -2,430 10,800	2	09115090	General Support to C31	•	2,390	2,354	2,867	-299	
0605510E General Support for Pel. 6 2,483 2,558 3,422 -557 2,865 060550ZE Small Business Innovative Research 6 7,851 4,400 4,40	9	0605117D	· Foreign Material Acquisition and Exploitation	9	9,196	9,845	13,868	-3,505	10,363 U
0605502E Small Business Innovative Research 6 7,851 0605713 Critical Technology Analysis 6 2,133 29,019 4,400 4,400 0605713 Defense Technology Analysis 6 2,133 29,019 4,400 23,824 06058028 Information Analysis Centers 6 4,579 4,483 6,997 -1,797 5,200 06058028 Information Analysis Centers 6 20,025 19,776 27,330 -1,797 5,200 06058026 Analysis Centers Baragement Headquarters (Barategic Defense 6 20,025 19,776 27,330 -2,540 24,790 10058902 Inflatative) Inflatative) Inflatative) 15,434 87 15,497 10058902 Inflatative) Inflatative) Inflatative) 15,403 15,497 27,330 -2,540 24,790 1008001.3 Inflatatial Preparedness 6 5,359 8,326 10,800 -5,630 10,800 1010105D Technology Security Functions	7	Q6115090	General Support for Pel	9	2,483	2,558	3,422	-557	
06057118 Critical Technology Analysis 6 2,133 29,019 4,400 4,400 4,400 4,400 4,400 23,824 4,400 23,824 4,400 23,824 25,620 23,824 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,620 23,824 25,000 23,824 25,000 23,824 25,000 23,730 22,540 24,790	8	0605502E	Small Business Innovative Research	9	7,851				
0605801S Defense Technical Information Centers 6 4,579 19,912 19,792 29,444 -5,620 2 0605802S Information Analysis Centers 6 4,579 4,883 6,997 -1,797 -1,797 0605802B Infrared Productivity Investments 6 20,025 19,776 27,330 -2,540 2,540 060589BC Management Headquarters (Research and Development) 6 12,993 15,034 15,410 87 11 060589BC Management Headquarters (Research and Development) 6 12,993 15,034 15,410 87 11 0702807D Infrared Focal Plane Array 6 5,359 8,326 10,800 16 001015D Technology Security Functions 6 1,599 484 492 -51 Defensewide Mission Support Total Development Test E Wall Def Ag 6,768,110 7,661,825 10,120,664 -1,452,864 8,561	0	06057118	Critical Technology Analysis	9	2,133	29,019	4,400		4,400 U
Information Analysis Centers 6	0	06058018	Defense Technical Information Center	9	19,912	19,792	29,444	-5,620	23.824 U
Productivity Investments Productivity Productions Productivity Productions Productio	_	06058028	Information Analysis Centers	9	4,579	4,883	6,997	-1,797	
Monogement Headquarters (Strategic Defense of Initiative) Strategic Defense of Initiative) <	~	0605872E	Productivity Investments	9		2,000	1,000	-1,000	
1005890E Management Headquarters (Research and Development) 6 12,993 15,034 15,410 87 1702807D Infrared Focal Plane Array 6 5,359 8,326 10,800 1708011S Industrial Preparedness 6 1,599 484 492 -51 1001015D Technology Security Functions 6 1,599 484 492 -51 Defensewide Mission Support 174,966 415,189 380,353 46,476 4.152,864 -1.452,864 8.56	-	06058980	Management Headquarters (Strategic Defense Initiative)	9	20,025	19,776	27,330	-2,540	24,790 U
1702807D Infrared Focal Plane Array 6 5,359 8,326 10,800 23,589 1708011S Industrial Preparedness 6 5,359 8,326 10,800 10,800 1001015D Technology Security Functions 6 1,599 484 492 -51 441 Defensewide Mission Support 174,966 415,189 380,353 46,476 426,829 Research Development Test & Eval Def Ag 6,768,110 7,661,825 10,120,664 -1,452,864 8,567,800	_	0605898E	Management Headquarters (Research and Development)	10	12,993	15,034	15,410	87	15,497 U
Off08011S Industrial Preparedness 6 5,359 8,326 10,800 10,800 O01015D Technology Security Functions 6 1,599 484 492 -51 441 Defensewide Mission Support 174,966 415,189 380,353 46,476 426,829 Research Development Test & Eval Def Ag 6,768,110 7,661,825 10,120,664 -1,452,864 8,657,800		0702807D	Infrared Focal Plane Array	9		1,969	78,624	-55,035	
Defensewide Mission Support Research Development Test & Eval Def Ag 10,120,664 1,599 484 492 -51 441 426,829 Research Development Test & Eval Def Ag 174,966 7,61,825 10,120,664 1,452.864 1,452.864		07080118	Industrial Preparedness	9	5,359	8,326	10,800		10,800 U
Defensewide Mission Support 174,966 415,189 380,353 46,476 Research Development Test & Eval Def Ag 6,768,110 7,661,825 10,120,664 -1,452,864 8	_	1001015D	Technology Security Functions	•	1,599	484	492	-51	441 U
Research Development Test & Eval Def Ag 6,768,110 7,661,825 10,120,664 -1.452.864		Defensevi	de Mission Support	•	174,966	415,189	380,353	46,476	426,829
	al	Research	Development Test & Eval Def Ag		6,768,110	7,661,825	10,120,664	-1.452.864	8 667 800

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Defense Agencies FY 1989 R D T & E Program

Exhibit R-1

Summary

AMENDED FY 1989 166,900 166,900 166,900 32,000 166,900 166,900 Date: February 1988. Thousands of Dollars FY 1989 ADJUSTMENT -19,228 -8,900 -19,228 -19,228 -19,228 -19,228 FY 88/89 PRES BUDGET FY 1989 40,900 186,128 186,128 186,128 . 186,128 186,128 186,128 182,116 31,600 182,116 FY 1988 182,116 182,116 182,116 182,116 119,906 FY 1987 119,906 119,906 119,906 119,906 119,906 Research and Development (FYDP Program 6) Research and Development (FYDP Program 6) Total Director of Test & Eval Defense Total Director of Test & Eval Defense Total Director of Test & Eval Defense Summary Recap of Research Categories Summary Recap of Budget Activities Summary Recap of FYDP Programs Defensewide Mission Support Engineering Development Management and Support

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Defense Agencies FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1

Appropriation: 0450 D Director of Test & Eval Defense

				,			Thousands of Dollars	f Dollars
Line	Program Blement Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
1	0604940D	Test Instrumentation Development	9		30,100	35,900	-5,900	30,000 u
~	0604941D	Space System Test Capabilities	v		1,500	2,000	-3,000	2,000 U
m	06051110	Foreign Weapons Evaluation	9	18,010	29,811	14,864	-2,000	12,864 U
•	0605130D	NATO Cooperative Development Testing	9	39,000	43,000	49,313	005'9-	42,813 U
S	0605131D	Live Fire Testing	•		6,700	5,000		S,000 U
9	0605132D	Joint Technical Coordinating Group for Aircraft Survivability	v		7,086	980'8	-1,000	7,086 U
7	0605804D	Development Test and Evaluation	9	62,896	63,919	596'19	-828	67,137 U
	Defensew	Defensewide Mission Support		119,906	182,116	186,128	-19,228	166,900
Tota	1 Directo	Total Director of Test & Eval Defense		119,906	182,116	186,128	-19,228	166,900

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Defense Agencies FY 1989 R D T & E Program

Summary

Date: February 1988 Exhibit R-1

				Thousands of Dollars	E Dollars
	FY 1967	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	AMENDED FY 1989
Summary Recap of Research Categories					
Engineering Development Hanagement and Support	11,300	59,000 11,221	138,000	-16,834	121,166,
Research and Development (FYDP Program 6)	11,300	70,221	149,657	-6,257	143,400
Total Director of Operational Test & Evaluation	11,300	70,221	149,657	-6,257	143,400
Summary Recap of Budget Activities					
Defensewide Mission Support	11,300	70,221	149,657	-6,257	143,400
Total Director of Operational Test & Evaluation	11,300	70,221	149,657	-6,257	143,400
Summary Recap of FYDP Programs					
Research and Development (FYDP Program 6)	11,300	70,221	149,657	-6,257	143,400
Total Director of Operational Test & Evaluation	11,300	70,221	149,657	-6,257	143,400

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Appropriation: 0460 D Director of Operational Test & Evaluation

Defense Agencies FY 1989 R D T & R Program

Exhibit R-1

							Date: Fe	Date: February 1988
			i				Thousands of Dollars	Thousands of Dollars
Line	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED 6 FY 1989 C
-	0604340D	OTER Capability Improvement	9		29,000	138,000	-16,834	11 791 . 161
N	0605118D	Operational Test and Svaluation	9	11,300	11,221	11,657	577	12.234 11
m	0605133D	SDS Orte Organization	9				10,000	10,000 u
	Defensew	Defensewide Hission Support		11,300	70,221	149,657	-6,257	143,400
Total	1 Director	Director of Operational Test & Evaluation		11,300	70,221	149,657	-6,257	143,400

Defense Mapping Agency FY 1989 R D T & E Program

Date: February 1988 Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

		i				Thousands of Dollars	f Dollars
Program Line Element No Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
14 0602716B	Mapping, Charting and Geodesy		830	300	1,100	-1,100	n
Technolo	Technology Base		830	300	1,100	-1,100	
49 0603701B	Mapping, Charting, Geodesy Investigations, and Prototype Development	ស	11,400	12,168	11,347	-5,923	5,424 U
50 0604701B	Mapping, Charting, and Geodesy Engineering Development and Teat	w	1,791	3,782	4,081	-2,701	1,380 U
57 0305139B	DMA Exploitation Modernization Program	SO.	235,829	285,000	293,317		293,317 11
59 0305159B	Defense Reconnaissance Support Activities	ഗ	4,147	2,853	4,332	-1,332	3,000 u
Intellig	Intelligence and Communications		253,167	303,803	313,077	956'6-	303,121
al Defense	Total Defense Mapping Agency		253,997	304,103	314,177	-11,056	303,121

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Strategic Defense Initiative Organ FY 1989 R D T & E Program

Date: February 1988

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

AMENDED e FY 1989 C 1,124,625 U 1,029,894 U 639,894 U 790,414 U 936,294 U 24,790 U 4,521,121 24,790 4,545,911 Thousands of Dollars FY 1989 ADJUSTMENT -734,905 -215,926 -263,356 -147,616 -371,775 -1,733,578 -2,540 -2,540 -1,736,118 FY 88/89 PRES BUDGET FY 1989 1,859,530 1,245,820 1,199,650 787,510 1,162,189 6,254,699 27,330 27,330 6,282,029 448,670 955,523 832,326 791,549 503,156 FY 1988 3,531,224 19,776 19,776 3,551,000 FY 1987 922,986 853,131 722,493 385,790 375,300 3,259,700 20,025 20,025 3,279,725 Act SDI-Surveillance, Acquisition, Tracking and Kill SDI-Systems Concepts and Battle Management/C3 SDI-Survivability, Lethality, and Key Support Technology Management Headquarters (Strategic Defense Initiative) SDI-Directed Energy Weapons SDI-Kinetic Energy Weapons Item Nomenclature Total Strategic Defense Initiative Organ Advanced Technology Development Defensewide Mission Support Frogram Line Element No Number 0603220C 06032230 06058980 0603221C 0603222C 0603224C

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11 16

18 19 Page D-11

Exhibit R-1

Office of Secretary/Defense FY 1989 R D T & E Program

, , 95,000 U 7,716 U 67,064 U 11,582 U 238,000 U 37,120 U 10,405 U 8,862 U 213,574 U. AMENDED FY 1989 95,000 380,749 213,574 Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT 95,000 95,000 -898 -8,836 6,394 -10,375 238,000 10,405 -18,974 -1,350 8,862 223,228 213,574 213,574 FY 88/89 PRES BUDGET FY 1989 8,614 8,836 86,038 10,375 12,932 30,726 157,521 9,845 12,163 85,000 15,000 5,000 24,567 FY 1988 24,608 16,500 126,108 14,768 45,466 200,000 10,827 337,636 49,224 49,224 4,015 13,639 FY 1987 7,176 12,201 10,274 182,314 24,389 254,008 Act Advanced Special Operations Research, Development Microwave/Millimeter Wave Monolithic Integrated Circuits (MIMIC) Computer Aided Logistics Support Joint DoD-DoE Munitions Technology Development Appropriation: 0400 D Research Development Test & Eval Def Ag Special Operations, Special Technology Office Defense University Research Instrumentation Counter-Insurgency and Special Technology Consolidated DoD Software Initiatives Cooperative DoD/VA Medical Research University Research Initiatives Balanced Technology Initiative Environmental Hazard Research Item Nomenclature Force Enhancements-Active Air Defense Initiative Advanced Technology Development and Acquisition Strategic Programs Technology Base 06011030 0602718D 0603225D 0603702D 0603703D 0601104D 0603706D 0603736D 0603737D 0603738D 0603756D 11100111 0603741D Program Element Number 0603740D 1140011D Line m 15 28 29 30 34 21 25 26 27 31 32 35 37

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Exhibit R-1

Office of Secretary/Defense FY 1989 R D T & E Program

62,076 U 15,900 U 34,766 U 44,785 U 200,598 U 3,812 'U 18,467 U 2,353 U 5,747 U 1,631 U 3,968 U 17,531 U 2,568 U AMENDED FY 1989 112,742 Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT 43,438 -2,177 -2,907 15,900 -7,228 34,766 -5,215 141,631 -11,220 -1,563 -973 -462 -299-3,505 FY 88/89 PRES BUDGET FY 1989 29,687 4,530 5,375 69,304 69,304 50,000 8,654 4,430 58,967 2,604 17,452 2,867 13,868 78,760 9,843 9,843 2,179 5,470 3,515 3,175 FY 1988 1,531 16,259 9,845 25,000 50,291 154,051 98,450 147,675 17,295 2,354 FY 1987 194,892 194,892 2,218 5,109 3,508 36,784 15,052 1,608 3,194 2,390 961'6 15,373 Act Technical Support to USD(A) -- Critical Technology Joint Tactical Information Distribution System Appropriation: 0400 D Research Development Test & Eval Def Ag Foreign Material Acquisition and Exploitation Rand National Defense Research Institute Joint Remotely Piloted Vehicles Program Semiconductor Manufacturing Technology General Support for Net Assessment Joint Standoff Weapons Program NATO Research and Development Technical Support to USD(A) General Support for Policy Item Nomenclature General Support for PASE General Support for FM&P General Support to C3I Intelligence and Communications (JTIDS) Tactical Programs LANDSAT 0604703D 0604702D 0604771D 0305141D 0603739D 0603790D 0605104D 0605106D 0605107D 0605108D Program Line Element 06015090 0605110D 0605112D 0605116D 0605117D Number 41 42 48 51 9 99 89 20 69 71 72 73 75

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10,363 U 2,865 U

-557

3,422

2,558

2,483

General Support for P&L

06051190

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Exhibit R-1

Office of Secretary/Defense FY 1989 R D T & E Program

Appropriation: 0400 D Research Development Test & Eval Def Ag

							Thousands of Dollars	f Dollars
No No	Line Element No Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	FY 1969 AMENDED e
8	0702807D	Infrared Focal Plane Array	99		1,969	78,624	-55,035	23,589 U
87	87 1001015D	Technology Security Functions	9	1,599	484	492	-51	441 U
	Defensew	Defensewide Mission Support		98,514	312,759	280,972	57,746	338,718
Total	l Office c	Office of Secretary/Defense		547,414	989,621	507,797	632,986	1,140,783

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Exhibit R-1

Defense Advanced Research Projects Agcy FY 1989 R D T & R Program

							Thousands of	of Dollars
Line	Program Element Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTHENT	S AMENDED 6 FY 1989 C
-	0601101B	Defense Research Sciences	-	98,976	80,000	97,535	-8,043	89,492 U
*	0601103E	University Research Initiatives	-	9,030		25,000	-25,000	Ð
9	0602101E	Technical Studies	-		1,700	1,600		1,800 U
-	0602301E	Strategic Technology	-	206,987	311,500	256,400	-28,760	227,640 U
8	0602702B	Tactical Technolgy		96,307	116,245	142,551	-25,680	116,871 U
6	0602707E	Particle Beam Technology	-	14,500	14,000	14,000		14,000 U
10	0602708E	Integrated Command and Control Technology		37,873	32,000	38,400	-5,040	33,360 U
11	0602712E	Materials and Electronics Technology	-	30,594	29,000	26,700	-6,160	20,540 U
12	0602714E	Nuclear Monitoring	-	19,021	24,330	22,600		22,600 U
	Technology Base	ly Base		503,288	638,775	624,986	-98,683	526,303
22	0603226E	Experimental Evaluation of Major Innovative	~	151,774	215,133	272,246	-47,200	225,046 U
23	0603227E	Technologies Relocatable Target Detection Technology Program	8		2,000	17,400	-2,000	15,400 U
24	06032698	National Aero Space Plane Technology Program	89	100,000				n
	Advanced	Advanced Technology Development		251,774	220,133	289,646	-49,200	240,446
74	0605114E	BLACK LIGHT	9	3,600	3,600	4,000	-400	3,600 U
18	0605502E	Small Business Innovative Research	9	7,851				
82	0605872E	Productivity Investments	•		2,000	1,000	-1,000	n ·
84	3868S090	Management Headquarters (Research and Development)	9	12,993	15,034	15,410	87	15,497 U
	Defensewi	Defensewide Mission Support		24,444	20,634	20,410	-1,313	19,097
Total		Defense Advanced Research Projects Agcy		179,506	879,542	935,042	-149,196	785,846
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National Security Agency FY 1989 R D T & E Program

Appropriation: 0400 D Research Development Test & Eval Def Ag

Exhibit R-1

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Fahrnary		
Dates		

	Drogram		1.				Thousands of Dollars	f Dollars
Lin	Line Element No Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 Adjustment	FY 1989 AMENDED 6 ADJUSTMENT FY 1989 C
52	52 0301011G	Cryptologic Activities	ທ					
26	0303401G	Communications Security (COMSEC)	ស					
09	0305159G	Defense Reconnaissance Support Activities	S					
62	62 0305167G	Computer Security	. ເດ		•			
99	0305885G	Tactical Cryptologic Activities	S					•
	Intellige	Intelligence and Communications						

Total National Security Agency

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Defense Nuclear Agency FY 1989 R D T & E Program

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

Appropriation	Appropriation: U400 D Research Development Test & Eval Def Ag				Date: February 1988	Date: Fe	Date: February 1988
		i				Thousands of Dollars	f Dollars
Program Line Element No Number	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989		FY 1989 AMENDED 6 ADJUSTMENT FY 1989 C
13 0602715н	Defense Nuclear Agency	-	306,019	302,888	393,446	-46,598	346,848 U
Technology Base	gy Base		306,019	302,888	393, 446	-46,598	346,848
otal Defense	Total Defense Nuclear Agency		306,019	302,888	393,446	-46,598	346,848

Defense Support Project Office FY 1989 R D T & E Program

Exhibit R-1

Date: February 1988 Appropriation: 0400 D Research Development Test & Eval Def Ag

Item Nomenclature Act FY 1987 FY 1988 Alrborne Reconnaissance Support Program Defense Reconnaissance Support Activities Spin 225 141,387 213,225 141,387 226,487		Program		i				Thousands of Dollars	f Dollars
Ge Support Program 5 87,100 98,561 B Support Activities 5 213,225 141,387 110,162 -71,956 213,225 228,487 110,162 26,605 1 213,225 228,487 110,162 26,605 1	CO)	Element	Item Nomenclature	Act	FY 1987	FY 1988	FY 88/89 PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	S AMENDED e FY 1989 C
8 Support Activities 5 213,225 141,387 110,162 -71,956 213,225 228,487 110,162 26,605 1 213,225 228,487 110,162 26,605 1		03051541	Airborne Reconnaissance Support Program	ĸ		87,100		98,561	98,561 U
213,225 228,487 110,162 26,605 213,225 228,487 110,162 26,605		03051591	Defense Reconnaissance Support Activities	ហ	213,225	141,387	110,162	-71,956	38,206 U
213,225 228,487 110,162 26,605		Intellige	nce and Communications		213,225	228,487	110,162	26,605	136,767
	-	1 Defense	Support Project Office		213,225	228,487	110,162	26,605	136,767

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Exhibit R-1

Defense Communications Agency FY 1989 R D T & E Program

AMENDED e FY 1989 c 2,371 U 57,018 U S,691 U 18,534 U 9,785 U 1,883 U 60,264 U 6,363 U 18,272 U 3,928 U 2,371 91,028 68,510 22,200 184,109 Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT -6,714 -286 -6,880 1,341 -947 6,363 66,400 -13,200 -227 -4,321 -474 60,264 -4,795 48,119 2,657 17,193 2,657 63,898 12,405 4,402 10,732 104,228 2,110 22,593 26,995 135,990 2,541 2,541 10,616 84,019 FY 1988 49,457 8,373 61,715 68,782 15,573 2,067 2,000 16,511 3,574 20,085 175,427 2,088 10,200 FY 1987 2,088 27,706 22,037 10,293 4,760 70,236 647 647 26,535 31,295 104,266 Act Management Headquarters (Joint Tactical C3 Agency) C3 Interoperability (Joint Tactical C3 Agency) Appropriation: 0400 D Research Development Test & Eval Def Ag National Military Command System-Wide Support Support of the National Communications System Hinimum Essential Emergency Communications Network (MEECN) Long-Haul Communications (DCS) Command and Control Research Item Nomenclature WWMCCS Systems Engineer Technology Development Intelligence and Communications Total Dafanse Communications Agency CINC C2 Initiatives Island Sun Strategic Programs Tactical Programs Advanced 0305108K 0302016K Program Element Number 0603734K 0302019K 0303131K 0201135K 0208045K 0303126K 0303127K 0208298K Line 33 39 38 40 54 46

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Defense Intelligence Agency FY 1989 R D T & E Program

Appropriation: 0400 D Research Development Test & Eval Def Ag

Date: February 1988

Exhibit R-1

S AMENDED e FY 1989 c Thousands of Dollars FY 1989 ADJUSTMENT FY 88/89 PRES BUDGET FY 1989 FY 1988 FY 1987 Act Intelligence Planning & Review Activities General Defense Intelligence Program Item Nomenclature 0305884L 53 0301301L Program Line Element No Number 63

Intelligence and Communications

Total Defense Intelligence Agency

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Date: February 1988 Exhibit R-1

Joint Tactical C3 Agency FY 1989 R D T & E Program Appropriation: 0400 D Research Development Test & Eval Def Ag

			į			Thousands of Dollars	Thousands of Dollars	f Dollars
Line	Line Element					FY 88/89		Ø.
S.	Number	Item Nomenclature	Act	FY 1987	FY 1988	PRES BUDGET FY 1989	FY 1989 ADJUSTMENT	
45	02080450	C3 Interoperability (Joint Tactical C3 Agency)	4	55.216		917		
47	02082980	Management Deadensates (25 th management Deadensates)				618 '60	-65,419	=
		Agency) (FY 87 and prior)	~	4,842		7,179	-7,179	n
	Tactical	Tactical Programs		60,058		72,598	-72.598	
Tota	l Joint Ta	Total Joint Tactical C3 Agency		60,058		72,598	-72,598	

Exhibit R-1

Defense Logistics Agency FY 1989 R D T & E Program Appropriation: 0400 D Research Development Test & Eval Def Ag

AMENDED 6 FY 1989 c 4,400 U 23,824 U 5,200 U 10,800 U 44,224 44,224 Date: February 1988 Thousands of Dollars FY 1989 ADJUSTMENT -1,797 -5,620 -7,417 -7,417 FY 88/89 PRES BUDGET FY 1989 29,444 4,400 6,997 10,800 51,641 51,641 4,883 62,020 29,019 FY 1988 19,792 8,326 62,020 2,133 4,579 5,359 FY 1987 19,912 31,983 31,983 Act Defense Technical Information Center Critical Technology Analysis Information Analysis Centers Item Nomenclature 0708011S Industrial Preparedness Defensewide Mission Support Total Defense Logistics Agency 06057118 06058028 06058018 Program Line Element No Number 81 79 80 98

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Uniformed Services University (USUHS) FY 1989 R D T & E Program

Date: February 1988

Exhibit R-1

Appropriation: 0400 D Research Development Test & Eval Def Ag

AMENDED e 2,070 U 2,070 2,070 Thousands of Dollars FY 1989 ADJUSTMENT -762 -762 -762 FY 88/89 PRES BUDGET FY 1989 2,832 2,832 2,832 2,442 2,442 2,442 FY 1988 FY 1987 1,897 1,897 1,897 Act 2 0601101W In-House Laboratory Independent Research Total Uniformed Services University (USUHS) Item Nomenclature Technology Base Program Line Element No Number

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